A11100 987993

NAT'L INST OF STANDARDS & TECH R.I.C.

A11100987993

Smith-Magowan, David/A bibliography of s
QC100 .U57 V537;1979 C.1 NBS-PUB-C 1979

NBS
PUBLICATIONS

NBS SPECIAL PUBLICATION 537

U.S. DEPARTMENT OF COMMERCE / National Bureau of Standards

A Bibliography of Sources of Experimental Data Leading to Thermal Properties of Binary Aqueous Electrolyte Solutions

QC
100
.U57
No.537
1979
C.2

NATIONAL BUREAU OF STANDARDS

The National Bureau of Standards[1] was established by an act of Congress March 3, 1901. The Bureau's overall goal is to strengthen and advance the Nation's science and technology and facilitate their effective application for public benefit. To this end, the Bureau conducts research and provides: (1) a basis for the Nation's physical measurement system, (2) scientific and technological services for industry and government, (3) a technical basis for equity in trade, and (4) technical services to promote public safety. The Bureau's technical work is performed by the National Measurement Laboratory, the National Engineering Laboratory, and the Institute for Computer Sciences and Technology.

THE NATIONAL MEASUREMENT LABORATORY provides the national system of physical and chemical and materials measurement; coordinates the system with measurement systems of other nations and furnishes essential services leading to accurate and uniform physical and chemical measurement throughout the Nation's scientific community, industry, and commerce; conducts materials research leading to improved methods of measurement, standards, and data on the properties of materials needed by industry, commerce, educational institutions, and Government; provides advisory and research services to other Government Agencies; develops, produces, and distributes Standard Reference Materials; and provides calibration services. The Laboratory consists of the following centers:

Absolute Physical Quantities[2] — Radiation Research — Thermodynamics and Molecular Science — Analytical Chemistry — Materials Science.

THE NATIONAL ENGINEERING LABORATORY provides technology and technical services to users in the public and private sectors to address national needs and to solve national problems in the public interest; conducts research in engineering and applied science in support of objectives in these efforts; builds and maintains competence in the necessary disciplines required to carry out this research and technical service; develops engineering data and measurement capabilities; provides engineering measurement traceability services; develops test methods and proposes engineering standards and code changes; develops and proposes new engineering practices; and develops and improves mechanisms to transfer results of its research to the utlimate user. The Laboratory consists of the following centers:

Applied Mathematics — Electronics and Electrical Engineering[2] — Mechanical Engineering and Process Technology[2] — Building Technology — Fire Research — Consumer Product Technology — Field Methods.

THE INSTITUTE FOR COMPUTER SCIENCES AND TECHNOLOGY conducts research and provides scientific and technical services to aid Federal Agencies in the selection, acquisition, application, and use of computer technology to improve effectiveness and economy in Government operations in accordance with Public Law 89-306 (40 U.S.C. 759), relevant Executive Orders, and other directives; carries out this mission by managing the Federal Information Processing Standards Program, developing Federal ADP standards guidelines, and managing Federal participation in ADP voluntary standardization activities; provides scientific and technological advisory services and assistance to Federal Agencies; and provides the technical foundation for computer-related policies of the Federal Government. The Institute consists of the following divisions:

Systems and Software — Computer Systems Engineering — Information Technology.

[1] Headquarters and Laboratories at Gaithersburg, Maryland, unless otherwise noted; mailing address Washington,D.C. 20234.

[2] Some divisions within the center are located at Boulder, Colorado, 80303.

The National Bureau of Standards was reorganized, effective April 9, 1978.

National Bureau of Standards
MAR 2 1979

T
not Acc-Circ
QC100
.U57
no.537
1979
c.2

A Bibliography of Sources of Experimental Data Leading to Thermal Properties of Binary Aqueous Electrolyte Solutions

David Smith-Magowan and Robert N. Goldberg

Center for Thermodynamics and Molecular Science
National Measurement Laboratory
National Bureau of Standards
Washington, DC 20234

Sponsored by:
Office of Standard Reference Data
National Measurement Laboratory
National Bureau of Standards
Washington, DC 20234
and
Division of Energy Storage Systems
Department of Energy
Washington, DC 20545

U.S. DEPARTMENT OF COMMERCE, Juanita M. Kreps, Secretary
Jordan J. Baruch, Assistant Secretary for Science and Technology
NATIONAL BUREAU OF STANDARDS, Ernest Ambler, Director

Issued March 1979

US

Library of Congress Catalog Card Number: 79-600010

National Bureau of Standards Special Publication 537
Nat. Bur. Stand. (U.S.), Spec. Publ. 537, 89 pages (Mar. 1979)
CODEN: XNBSAV

U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON: 1979

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402
Stock No. 003-003-02033-8 Price $2.75
(Add 25 percent additional for other than U.S. mailing)

Foreword

The National Standard Reference Data System was established in 1963 for the purpose of promoting the critical evaluation and dissemination of numerical data of the physical sciences. The program is coordinated by the Office of Standard Reference Data of the National Bureau of Standards but involves the efforts of many groups in universities, government laboratories, and private industry. The primary aim of the program is to provide compilations of critically evaluated physical and chemical property data. These tables are published in the *Journal of Physical and Chemical Reference Data*, in the NSRDS-NBS series of the National Bureau of Standards, and through other appropriate channels.

The task of critical evaluation is carried out in various data centers, each with a well-defined technical scope. A necessary preliminary step to the critical evaluation process is the retrieval from the world scientific literature of all papers falling within the scope of the center. Each center, therefore, builds up a comprehensive well-indexed bibliographical file which forms the base for the evaluation task. Bibliographies derived from these files are published when they appear to be of value to research workers and others interested in the particular technical area.

Further information on NSRDS and the publications which form the primary output of the program may be obtained by writing to the Office of Standard Reference Data, National Bureau of Standards, Washington, D.C. 20234.

David R. Lide, Jr., Chief
Office of Standard Reference Data

A Bibliography of Sources of Experimental Data Leading to Thermal Properties of Binary Aqueous Electrolyte Solutions

David Smith-Magowan[1] and Robert N. Goldberg

Center for Thermodynamics and Molecular Science
National Bureau of Standards
Washington, DC 20234

Contained herein is a bibliography of sources of experimental data that can be used to calculate either relative apparent molal enthalpies or apparent molal heat capacities for aqueous electrolyte solutions. The data types included are calorimetric heat capacity measurements, enthalpies of solution as a function of molality, enthalpy of dilution measurements, electromotive force measurements as a function of temperature, and vapor pressure measurements as a function of temperature. Approximately 900 references to the primary literature are included.

Key Words: Apparant molal heat capacity; aqueous systems; bibliography; electrochemistry; electrolytes; enthalpy of dilution; heat capacity; relative apparant molal enthalpy; salt solutions; thermochemistry; vapor pressure.

---

[1] Present address: Chemistry Department, University of Delaware, Newark, Delaware, 19711.

Introduction

The object of this bibliography is to identify published experimental measurements that can be used to calculate either relative apparent molal enthalpies (Φ_L) or apparent molal heat capacities (Φ_c) for aqueous electrolyte solutions. The reader is referred to standard texts such as Lewis and Randall and Pitzer and Brewer [1] and Harned and Owen [2] for background pertaining to the definition, measurement, and calculation of these thermodynamic functions.

The categories of data with which we are concerned and the abbreviations we shall use to designate them are as follows:

Category	Symbol
Calorimetric heat capacity	C
Electromotive force as a function of temperature	E
Enthalpy of solution as a function of molality	H
Enthalpy of dilution	L
Vapor pressure as a function of temperature	V

Category (C) above also includes enthalpies of solution as a function of temperature that have typically [3] been used to calculate values of the apparent molal heat capacity at infinite dilution ($\Phi_c°$). We have included a reference under category H only if the data set seemed sufficiently precise to permit calculation of meaningful values of Φ_L from the slope of the plot of the enthalpy of solution as a function of the molality.

For each compound we have arranged the references that contain the various categories of data according to the above order (note that references are repeated if they contain more than one category of data). We have also specified the temperature(s) to which the data pertain.

We have specifically excluded from this bibliographic coverage data on mixed electrolytes (except for seawater, natural and artificial) and data on non-aqueous systems.

Our literature search encompassed the following: (1) a search of the files of the Chemical Thermodynamic and Electrolyte Data Centers at the National Bureau of Standards; (2) a search of the computerized index to Chemical Abstracts from Volumes 76 to 89 (November 1978); (3) a search of several pertinent reviews and compilations [2,4-10]; and (4) a search of the appropriate citations given in the papers located via procedures (1) to (3) above. The scientific literature is so very large and diverse that we have probably missed some data sources. We shall appreciate it if any readers who find any citations missing or in error will bring such items to our attention.

Several reviews and compilations that are particularly noteworthy are: Parker [4] for the uni-univalent electrolytes; Landolt-Börnstein [5,6] and Latysheva [7], which contains references to hard-to-obtain Soviet works; the NBS 270 Series [8] contains extensive tables of enthalpies of formation as a function of the molality which permits calculation of enthalpies of dilution. Particularly notable mathematical treatments of the experimental data are summarized by Lange [9] and Pitzer and Silvester [10].

Ordering of Compounds

While the standard order of arrangement [4] (see figure 1) has been adopted for the catalogue of inorganic systems, it was felt that this method would greatly reduce the efficiency of this compilation for workers in the field if used for the organic compounds. Therefore the following method was adopted for these systems in an effort to retain their functional identity as a ready reference to them.

The organic compounds are grouped according to functional types. Within each type, subgroups are determined first by standard order of arrangement for the cation (M^+ or $C_nH_mO_p^+$), then by standard order of arrangement for the anion (X^- or $C_nH_m\theta_p^-$), except for the amino acids, which have been arranged alphabetically. The functional types are arranged as follows.

1. Aminoacids
2. Carboxylic acids
3. Carboxylate salts
4. Ammonium salts
    - A. RNH_3X
    - B. R_2NH_2X
    - C. R_3NHX
    - D. R_4NX
    - E. $R'R_3NX$
    - F. $R'R''R_2NX$
5. Azoniaspiroalkanes
6. Bolaforms
7. Surfactants (organic sulfates and sulfonates)
8. Miscellaneous

References

[1] Lewis, G. N. and Randall, M., Thermodynamics, 2nd edition, revised by K. S. Pitzer and L. Brewer, McGraw-Hill Book Co., New York, (1961).

[2] Harned, H. S. and Owen, B. B., The Physical Chemistry of Electrolyte Solutions, 3rd ed., Reinhold Pub. Corp., New York, (1958).

[3] Criss, C. E. and Cobble, J. W., J. Am. Chem. Soc. 83, 3223 (1961).

[4] Parker, V. B., Thermal Properties of Aqueous Uni-univalent Electrolytes, NSRDS NBS 2, U.S. Government Printing Office, (1965).

[5] Beggerow, G., Landolt-Börnstein. Neue Serie. Band 2. Mischungs- und Losüngswärmen, (Kl. Schäfer, editor) Springer-Verlag, Berlin, 1976.

[6] D'Ans, J. D., Surawski, H., and Synowietz, C., Landolt-Börnstein. Neue Serie. Band 1. Teil b. Dichten binärer wässeriger Systeme und Warmetkapaztäten Flüssiger Systeme (Kl. Schäfer, editor) Springer-Verlag, Berlin, 1977.

[7] Latysheva, V. A., Usp. Khim. 42, 1757 (1973); Russ. Chem. Rev. (Engl. Trans.) 42, 803 (1973).

[8] Wagman, D. D., Evans, W. H., Parker, V. B., Halow, I., Bailey, S. M., Schumm, R., and Churney, K. L., Selected Values of Chemical Thermodynamic Properties, Nat. Bur. Stand. (U.S.) Tech. Notes 270-3, 4, 5, 6 and 7, U.S. Government Printing Office, Washington, DC (1968 to 1973); also see Wagman, D. D., Evans, W. H., Parker, V. B., and Schumm, R. H., Chemical Thermodynamic Properties of Compounds of Sodium, Potassium and Rubidium: An Interim Tabulation of Selected Values, Nat. Bur. Stand. (U.S.) Report 76-1034, April 1976.

[9] Lange, E., in The Structure of Electrolyte Solutions, (W. J. Hamer, editor), John Wiley and Sons, Inc., New York, (1959).

[10] Pitzer, K. S. and Silvester, L. F., J. Phys. Chem. 82, 1239 (1978).

Acknowledgments

The authors express their appreciation to Drs. George Marinenko, Richard Martinez, Henry Rosenstock, and Masao Kuriyama for their assistance with the papers in foreign languages; to Dr. Bert Staples and Ms. Terry Wobbeking, for their cooperation with this search; to Mr. D. D. Wagman and Dr. W. H. Evans for their very careful reading of this paper; and to the staff of the NBS library for their assistance in locating and obtaining the myriad of difficult references we have required and examined during this effort.

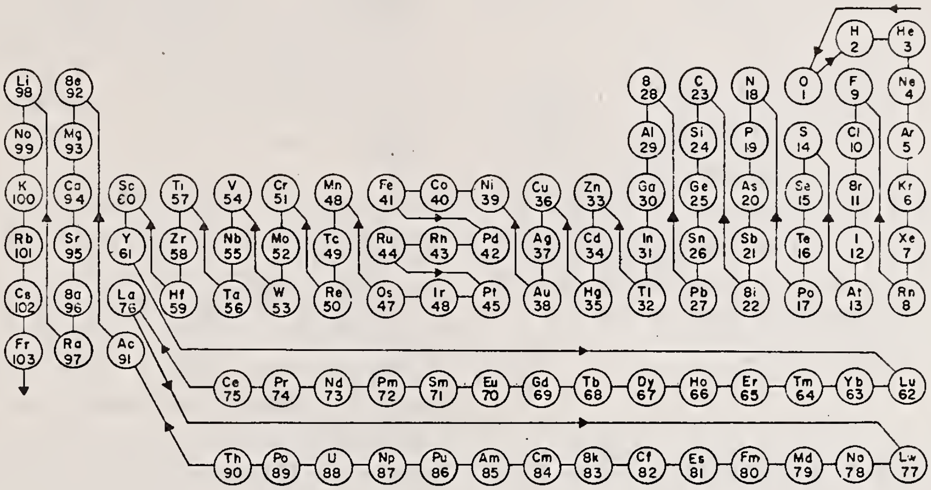


Figure 1. The standard order of arrangement [8]. In this scheme, a compound is listed under the element occurring latest in the list. Within the table for a given element will be found all of the compounds of that element with elements occurring earlier in the order. An exception occurs for carbon compounds which are divided into subgroups consisting of all compounds with one carbon atom, then all with two carbon atoms, etc.

Compound Index

Inorganic Compounds

HF

Büchner (1931) - C 20°C

Kolesov, Skuratov and Uvanov (1960) - C 20 to 25°C

Mulert (1912) - C 17 to 18°C

Pranschke and Schwiete (1935) - C 18°C

Ray (1922) - C Room temperature

Roth and Chall (1928) - C 22 to 50°C

Roth, Pahlke, Bertram and Börger (1937) - C 20°C

Thorvaldson and Bailey (1946) - C 18 to 20°C

Broene and DeVries (1947) - E 15 to 35°C

Elmore, Hatfield, Mason and Jones (1949) - H 25°C

Johnson, Smith and Hubbard (1973) - H 25°C

Cox and Harrop (1965) - L 25°C

Guntz (1884) - L 17°C

Guntz (1883) - L 17°C

Johnson, Smith and Hubbard (1973) - L 25°C

Petersen (1893) - L 21°C

Roth and Becker (1931) - L 19°C

Roth, Pahlke and Bertram (1933) - L 20°C

Roth, Pahlke, Bertram and Börger (1937) - L 20°C

Schäfer and Kahlenberg (1958) - L 25°C

Schäfer and Kahlenberg (1960) - L 25°C

Vasil'ev and Kozlovski (1974) - L 25°C

HCl

Ackermann (1958) - C 10 to 120°C

Büchner (1931) - C 20°C

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Drucker (1934) - C 18°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Gucker and Schminke (1932) - C 25°C

Magie (1907) - C temperature not given

Marignac (1878) - C 20 to 24°C

Radulescu and Jula (1934) - C 15°C

Randall and Ramage (1927) - C 25°C

Richards, Mair and Hall (1929) - C 16 to 20°C

Richards and Rowe (1908 a and b) - C 16°C

Richards and Rowe (1913 a and b) - C 16 to 20°C

Rossini (1931b) - C 18°C

Singh, Woolley, McCurdy and Hepler (1976) - C 25°C

Thomsen (1883a) - C 18°C

Thorvaldson, Brown and Peaker (1930) - C 20°C

Tucker and Callendar (1915) - C 6 to 13°C

Wicke, Eigen and Ackermann (1954) - C 20 to 120°C

Wrewsky and Kaigorodoff (1924) - C 3 to 60°C

Akerlof and Teare (1936) - E 0 to 50°C

Bates and Bower (1954) - E 0 to 95°C

Cerquetti, Longhi and Mussini (1968) - E 25 to 80°C

Ellis (1916) - E 18 to 35°C

Greeley, Smith, Stoughton and Lietzke (1960) - E 25 to 200°C

Grzybowski (1958) - E 0 to 60°C

Harned and Ehlers (1933) - E 0 to 60°C

Hayes and Lietzke (1960) - E 25 to 55°C

Macaskill, Robinson and Bates (1977) - E 5 to 45°C

Wrewsky and Sawaritzky (1924) - H 3 to 60°C

Ahrland and Kullberg (1971) - L 25°C

Berthelot (1875d) - L 10°C

Böse (1905) - L temperature not given

Ciavatta and Palombari (1972) - L 25°C

Danielsson, Nelander, Sunner and Wadsö (1964) - L 25°C

Doehlemann and Lange (1933) - L 25°C

Falk and Sunner (1973) - L 25°C

Grenthe, Ots and Ginstrup (1970) - L 25°C

Muller (1913) - L 14 to 38°C

Naudé (1928) - L 18°C

Olofsson and Olofsson (1973) - L 25 to 140°C

Paoletti, Usenza and Vacca (1965) - L 25°C

Payn and Perman (1929) - L 22 to 70°C

Petersen (1893) - L 21°C

Richards, Mair and Hall (1929) - L 16 to 20°C

Richards and Rowe (1920) - L 16 to 20°C

Richards, Rowe and Burgess (1910) - L 20°C

Richards and Thorvaldson (1922) - L 20°C

Rossini (1931a) - L 18°C

Roth (1944) - L 20°C

Roth and Becker (1931) - L 19°C

Roth and Bertram (1937) - L 20°C

Roth, Umbach and Chall (1930) - L 96°C

Roth and Wienert (1934) - L 20°C

Schäfer, Wittig and Jori (1956) - L 25°C

Sturtevant (1940a) - L 25°C

Sturtevant (1942) - L 25°C

HCl (continued)

Thomsen (1883b) - L 18°C

Tucker and Callendar (1912) - L 16 to 22°C

Vanderzee and Myers (1961) - L 25°C

Van Nuys (1943) - L 0 to 100°C

Von Steinwehr (1901) - L 16°C

Vrevskii and Zavaritskii (1923) - L 3 to 63°C

Wrewsky and Sawaritzky (1924) - L 14°C

$HClO_4$

Babakulov and Latysheva (1974) - C 25°C

Berthelot (1881) - C 15 to 40°C

Berthelot (1882) - C 15 to 40°C

Grigor'eva, Latysheva and Shchukarev (1977) - C 25°C

Jauch (1921) - C 18°C

Richards and Rowe (1913 a and b) - C 16 to 20°C

Singh, McCurdy, Woolley and Hepler (1977) - C 25°C

Krivtsov, Rosolovsky and Zinov'ev (1960) - H 25°C

Austin and Mair (1962) - L 25°C

Berthelot (1881a) - L 13 to 21°C

Berthelot (1882) - L 13 to 21°C

Bidinosti and Biermann (1956) - L 25°C

Vanderzee and Swanson (1963a) - L 25°C

Vanderzee and Swanson (1963b) - L 25°C

Vasil'ev, Kochergina and Orlova (1976) - L 25°C

HBr

Johnson, Gilliland and Prosen (1959) - C 25 to 27°C

Richards and Rowe (1913 a and b) - C 16 to 20°C

Rossini (1931b) - C 18°C

Roozeboom (1886) - C 0 to 30°C

Singh, Woolley, McCurdy and Hepler (1976) - C 25°C

Augustynski, Faita and Mussini (1967) - E 20 to 40°C

Biermann and Yamasaki (1955) - E 20 to 30°C

Gupta, Hills and Ives (1963) - E 5 to 45°C

Harned, Keston and Donelson (1936) - E 0 to 60°C

Hetzer, Robinson and Bates (1962) - E 0 to 50°C

Towns, Greeley and Lietzke (1960) - E 25 to 200°C

Biermann and Weber (1954) - L 25°C

Böse (1905) - L temperature not given

Petersen (1893) - L 21°C

Roth and Bertram (1937) - L 20°C

Thomsen (1883b) - L 18°C

Tucker and Callendar (1915) - L 20°C

Vanderzee, Nutter, Rodenburg, Rodenburg and King (1974) - L 25°C

HI

Johnson, Gilliland and Prosen (1959) - C 25 to 27°C

Richards and Rowe (1913 a and b) - C 16 to 20°C

Rossini (1931b) - C 18°C

Böse (1905) - L temperature not given

Thomsen (1883b) - L 18°C

Vanderzee and Gier (1974) - L 25°C

HIO_3

Jauch (1921) - C 18°C

Randall and Taylor (1941) - C 25°C

Berthelot (1878) - L 13°C

Moles and Vitoria (1932) - L 20°C

Stern and Passchier (1962) - L 25°C

Woolley, Hill, Hannan and Hepler (1978) - L 25°C

SO_2

Roth and Zeumer (1932) - L 20°C

H_2SO_4

Agde and Holtmann (1926) - C 25 to 45°C

Berthelot (1875c) - C ∿10°C

Bode (1889) - C 15°C

Brönsted (1910) - C temperature not given

Cattaneo (1889) - C 5 to 22°C

Craig and Vinal (1940) - C 20°C

Drucker (1934) - C 18°C

Gardner, Jekel and Cobble (1969) - C 0 to 100°C

Hartung (1915) - C 17 to 20°C

Knietsch (1901) - C 30°C

Kunzler and Giauque (1952) - C 25°C

Magie (1907) - C temperature not given

Marignac (1878) - C 16 to 20°C

Pascal and Garnier (1920) - C 20°C

Pickering (1891) - C -32 to 41°C

H_2SO_4 (continued)

Porter (1918) - C 15 to 200°C
Radulescu (1934) - C 16°C
Randall and Taylor (1941) - C 25°C
Rhodes and Nelson (1938) - C 18°C
Schlesinger (1909) - C 0 to 70°C
Socolik (1932) - C 20 to 80°C
Thomsen (1883a) - C 18°C
Beck, Dobson and Wynne-Jones (1960) - E 5 to 55°C
Beck, Singh and Wynne-Jones (1959) - E 5 to 55°C
Cowperthwaithe and Shrawder (1934) - E 0 to 50°C
Hamer (1935) - E 0 to 60°C
Harned and Hamer (1935) - E 0 to 60°C
Shrawder and Cowperthwaite (1934) - E 0 to 50°C
Thibaut (1913) - E 15 to 50°C
Brönsted (1910) - H temperature not given
Karve (1924) - H 0 to 40°C
Knietsch (1901) - H 20°C
Berthelot (1875d) - L 10°C
Bewley (1960) - L 25°C
Bose (1905) - L temperature not given
Craig and Vinal (1940) - L 25°C
DeForcrand (1884b) - L 10°C
Favre and Silbermann (1853) - L temperature not given
Giauque, Hornung, Kunzler and Rubin (1960) - L 25°C
Graham (1843) - L temperature not given
Grau and Roth (1931) - L 15 to 20°C
Kirkbride and Wyatt (1958) - L 25°C
Mathias (1890) - L 16°C
Morgan (1942) - L 18°C
Muller (1913) - L 14 to 38°C
Naudé (1928) - L 18°C
Porter (1918) - L 15 to 200°C
Prêtat (1930) - L 20 to 25°C
Roth and Meichsner (1931) - L 19°C
Rümelin (1907) - L 14°C
Thomsen (1883b) - L 18°C
Tucker and Callendar (1915) - L 20°C
Von Hermann (1941) - L 18°C
Wu (1957) - L 25°C
Yudin (1939) - L 25°C
Brönsted (1910) - V 20 to 100°C
Burt (1904) - V 55 to 105°C
Hornung and Giauque (1955) - V 23 to 70°C
Von Meyeren (1932) - V 0 to 40°C

H_2SeO_3

Selivanova and Pakorukov (1961) - C 25°C

H_2SeO_4

Selivanova, Kapustinskii and Zubova (1959) - L 25°C
Selivanova, Zubova and Finkelstein (1959) - L 25°C

NH_4OH

Chernen'kaya (1971a) - C 25°C
Chernen'kaya (1971b) - C 25°C
Chernen'kaya and Bratash (1975) - C 35 to 90°C
Gawlick (1977) - C 18°C
Hildenbrand and Giauque (1953) - C 78 to -10°C
Thomsen (1883a) - C 18°C
Wrewsky and Kaigorodoff (1924) - C 3 to 60°C
Wrewsky and Sawaritzky (1924) - H 3 to 60°C
Baud and Gay (1909) - L 10°C
Berthelot (1875d) - L 10°C
Berthelot (1875f) - L 14°C
Calvet (1933) - L 17°C
Ramstetter and Hantke (1931) - L 20°C
Thomsen (1883b) - L 18°C
Vrevskii and Zavaritskii (1923) - L 3 to 63°C
Wrewsky and Sawaritzky (1924) - L 15°C

N_2H_4

Bushnell, Hughes and Gilbert (1937) - C 25°C
Bushnell, Hughes and Gilbert (1937) - L 25°C

HNO_3

Boomann, Elverum and Mason (1955) - C 0°C
Bump and Sibbitt (1955) - C -40 to 137°C
Drucker (1934) - C 18°C
Enea, Singh, Woolley, McCurdy and Hepler (1977) - C 25°C
Kharbanda (1957) - C 93°C
Marignac (1878) - C 20 to 52°C
Mishchenko (1931) - C 2 to 60°C
Mishchenko and Ponomareva (1952) - C 25°C
Mondain-Monval (1923a) - C 0 to 19°C

HNO_3 (continued)

Pascal and Garnier (1920) - C 20°C

Richards and Rowe (1913 a and b) - C 16 to 20°C

Rossini (1931b) - C 18°C

Thomsen (1883a) - C 18°C

Becker and Roth (1935) - L 20°C

Berthelot (1874) - L 11°C

Berthelot (1875b) - L 10 to 26°C

Berthelot (1875d) - L 10°C

Booman, Elverum and Mason (1955) - L 0°C

Böse (1905) - L temperature not given

Chédin and Dhers (1953) - L 25°C

Forsythe and Giauque (1942) - L 25°C

Lloyd and Wyatt (1957) - L 25°C

Naudé (1928) - L 18°C

Petersen (1893) - L 21°C

Pretat (1930) - L 20 to 25°C

Rhodes and Nelson (1938) - L 18°C

Richards and Rowe (1921) - L 16 to 20°C

Rossini (1931a) - L 18°C

Thomsen (1883b) - L 18°C

Tucker and Callendar (1915) - L 20°C

Vasil'ev, Kochergina and Orlova (1975) - L 25°C

Wilson and Miles (1940) - V 0 to 20°C

NH_4NO_3

Chauvenet (1938) - C 15°C

Cohen, Helderman and Moesveld (1924a) - C 32°C

Cohen, Helderman and Moesveld (1924b) - C 32°C

Drucker (1934) - C 20°C

Epikhin, Bazlova and Karapet'yants (1977) - C 25°C

Gucker, Ayres and Rubin (1936) - C 25°C

Marignac (1878) - C 20 to 52°C

Roux, Musbally, Perron, Desnoyers, Singh, Woolley and Hepler (1978) - C 25°C

Rutskov (1946) - C 25 to 75°C

Rutskov (1948) - C 25 to 75°C

Sorina, Kozlovskaya, Tsekhanskaya, Bezlyudova and Shmakov (1977) - C 25 to 100°C

Thomsen (1883a) - C 18°C

Winkelman (1873) - C 16 to 35°C

Fedorov and Sil'chenko (1937) - H 23°C

Becker and Roth (1934) - L 20°C

Dunnington and Hoggard (1899) - L 25°C

Lerner-Steinberg (1926) - L 25°C

Ping-Lu, Schäfer, Schuller, and Stiern (1970) - L 19.5°C

Poczopko and Mecik (1971) - L 25°C

Rant (1954) - L 20°C

Rümelin (1907) - L 11°C

Thomsen (1883b) - L 18°C

Tollinger (1875) - L 21°C

Van Deventer and Van destadt (1891) - L 18°C

Von Wartenberg and Lerner-Steinberg (1926) - L 18°C

Wassermann (1930a) - L 18°C

Campbell, Fishmann, Rutherford, Schaefer and Ross (1956) - V 30 to 105°C

NH_4F

Labowitz and Westrum (1961) - C -220 to -20°C

NH_4Cl

Chernen'kaya (1971b) - C 25°C

Chernen'kaya and Bratash (1975) - C 25 to 90°C

Colson (1915) - C 15 to 22°C

D'Ans and Tollert (1937) - C 20 to 86°C

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Drucker (1934) - C 18°C

Epikhin, Bazlova and Karapet'yants (1977) - C 25°C

Leduc and Desnoyers (1973) - C 25°C

Magie (1907) - C temperature not given

Marignac (1878) - C 20 to 52°C

Mishchenko and Ponomareva (1952) - C 25°C

Mishchenko and Ponomareva (1956) - C 25 to 75°C

Roux, Musbally, Perron, Desnoyers, Singh, Woolley and Hepler (1978) - C 25°C

Thomsen (1883a) - C 18°C

Urban (1932) - C 10 to 40°C

Winklemann (1873) - C 2 to 40°C

Fedorov and Sil'chenko (1937) - H 23°C

Mishchenko and Ponomareva (1956) - H 25 to 75°C

Doehlmann and Lange (1934) - L 25°C

Dunnington and Hoggard (1899) - L 25°C

Kratz and Lange (1933) - L 15°C

Magie (1912) - L 3 to 22°C

Pratt (1918) - L 0 to 35°C

Rümelin (1907) - L 13°C

Streeck (1934) - L 25°C

Thomsen (1883b) - L 18°C

NH_4Cl (continued)

Van Deventer and Van destadt (1891) 18°C

Vichutinskii and Golikov (1978) - L 25°C

Von Stackelberg (1898) - L 18°C

N_2H_5Cl

Cobb and Gilbert (1935) - C 20 to 25°C

$N_2H_6Cl_2$

Cobb and Gilbert (1935) - C 20 to 25°C

NH_4ClO_4

Roux, Musbally, Perron, Desnoyers, Singh, Woolley and Hepler (1978) - C 25°C

$N_2H_5ClO_4$

Cobb and Gilbert (1935) - C 20 to 25°C

NH_4Br

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Faasch (1977b) - C 18°C

Leduc and Desnoyers (1973) - C 25°C

Leduc, Fortier and Desnoyers (1974) - C 25°C

Fedorov and Sil'chenko (1937) - H 23°C

Leduc, Fortier and Desnoyers (1974) - L 25°C

N_2H_5Br

Cobb and Gilbert (1935) - C 20 to 25°C

$N_2H_6Br_2$

Cobb and Gilbert (1935) - C 20 to 25°C

Gilbert and Bushnell (1935) - L 25°C

$(NH_4)HSO_4$

Thomsen (1883b) - L 18°C

$(NH_4)_2SO_4$

Drucker (1934) - C 17°C

Marignac (1878) - C 19 to 51°C

Thomsen (1883a) - C 18°C

Thomsen (1883b) - L 18°C

Van Deventer and Van destadt (1891) - L 18°C

$N_2H_6SO_4$

Gilbert and Bushnell (1935) - C 25°C

H_3PO_2

Petersen (1893) - L 21°C

H_3PO_4

Egan, Luff and Wakefield (1958) - C 15 to 80°C

Poppoff, Skuratoff and Feodossjeff (1933) - C 22 to 100°C

Smirnova, Matveichuk, Mikhailin and Illarionov (1969) - C 25 to 100°C

Böse (1905) - L temperature not given

Egan and Luff (1961) - L 25°C

Irani and Taulli (1966) - L 25°C

Jones and Lee (1970) - L 50°C

Luff, Reed and Wakefield (1971) - L 25°C

Petersen (1893) - L 21°C

Rümelin (1907) - L 14°C

Thomsen (1883b) - L 18°C

Wakefield, Luff and Reed (1972) - L 25 to 200°C

Yudin (1939) - L 25°C

Kablukov and Zagwosdkin (1935) - V 25 to 80°C

$NH_4H_2PO_4$

Perreu (1940a) - C 18°C

Rutskov (1946) - C 25 to 75°C

Voskresenskaya and Rutskov (1940) - C 25 to 95°C

Egan and Luff (1963) - H 25°C

Chomjakov, Jaworowskaja and Schirokich (1933) - L 23°C

Perreu (1940a) - L 18°C

$(NH_4)_2HPO_4$

Chomjakow, Jaworowskaja and Schirokich (1933) - L 23°C

Komyakov, Yavorovskaya, and Shirokikh (1933) - L 22°C

As_2O_3

Bjellerup, Sunner and Wadsö (1957) - C 25°C

NH_4HCO_3

Chernen'kaya (1971a) - C 25°C

Chernen'kaya and Bratash (1972) - C 35 to 50°C

Chernen'kaya and Bratash (1975) - C 60°C

Thomsen (1883b) - L 18°C

$PbCl_2$

Hannan (1936) - E 0 to 50°C

$Pb(ClO_4)_2$

Drakin and Yu-min (1964) - H 25°C

$Pb(NO_3)_2$

Drakin, Lantukhova and Karapet'yants (1967) - C 25°C

Jauch (1921) - C 18°C

Marignac (1878) - C 21 to 51°C

Perreu (1941b) - C 11°C

Sergeeva, Drakin and Karapet'yants (1970b) - C 18 to 32°C

Berthelot (1873c) - L temperature not given

Perreu (1941b) - L 10°C

Plake (1932) - L 20°C

Stern, Parker, Peak and Volland (1963) - L 25°C

Thomsen (1883b) - L 18°C

H_3BO_3

Scholle, Szmigielska and Dlabac (1965) - H 20°C

Smisko and Mason (1950) - H 25°C

Davis, Mason and Stegeman (1949) - L 25°C

Lange and Miederer (1957a) - L 10 to 40°C

Ward and Millero (1973) - L 10 to 50°C

$AlCl_3$

Jauch (1921) - C 18°C

Lange and Miederer (1957b) - L 25°C

$Al(ClO_4)_3$

Babakulov and Latysheva (1975) - C 25°C

$Al(NO_3)_3$

Jauch (1921) - C 18°C

Myasnikova, Drakin, Karapet'yants and Latuknova (1968) - C 25°C

$Al_2(SO_4)_3$

Doerinckel (1910) - C temperature not given

Marignac (1878) - C 21 to 53°C

Doerinckel (1910) - L temperature not given

Perreu (1934a) - L 17°C

$Ga(ClO_4)_3$

Babakulov and Latysheva (1974) - C 25°C

$InCl_3$

Campbell, Kartzmark and Bhatnagar (1974) - L 25°C

Campbell, Kartzmark and Bhatnager (1974) - H 25°C

$In(ClO_4)_3$

Babakulov and Latysheva (1974) - C 25°C

Vasil'ev and Kozlovskii (1974) - L 25°C

$InBr_3$

Jauch (1921) - 18°C

$In_2(SO_4)_3$

Hattox and DeVries (1947) - E 0 to 35°C
Lietzke and Stoughton (1956) - E 15 to 70°C

TlF

Jauch (1921) - C 18°C

$Tl(ClO_4)_3$

Babakulov and Latysheva (1974) - C 25°C
Kul'ba, Yakovlev and Kopylov (1973) - L 25°C

$TlNO_3$

Stern, Parker, Peak and Volland (1963) - L 25°C

ZnF_2

Cook, Davis and Stavely (1971) - H 25°C

$ZnCl_2$

Blümcke (1884) - C 15 to 17°C
Karapet'yants, Drakin and Lantukhova (1967) - C 25°C
Marignac (1878) - C 19 to 51°C
Robinson and Stokes (1940) - E 0 to 40°C
Fricke and Lüke (1929) - L 20°C
Fricke and Havestadt (1927) - L 0 to 10°C
Thomsen (1883b) - L 18°C

$Zn(ClO_4)_2$

Spitzer, Singh, Olofsson and Hepler (1978) - C 25°C
Berg and Vanderzee (1975) - L 25°C
Letysheva and Karavan (1968) - H 25 to 45°C
Shchukarev, Andreev and Borisova (1959) - H 25°C

$ZnBr_2$

Stokes and Stokes (1945) - E 20 to 40°C

ZnI_2

Bates (1938) - E 10 to 40°C

$ZnSO_4$

Cohen, Helderman and Moesveld (1924a) - C 19°C
Cohen, Helderman and Moesveld (1924b) - C 19°C
Marignac (1878) - C 20 to 52°C
Cowperthwaite and LaMer (1931) - E 0 to 50°C
LaMer and Cowperthwaite (1933) - E 0 to 50°C
Fedorov and Sil'chenko (1937) - H 23°C
Berthelot (1873c) - L temperature not given
Giauque, Barieau and Kunzler (1950) - L 25°C
Lange and Monheim (1933) - L 25°C
Lange, Monheim and Robinson (1933) - L 25°C
Larson (1970) - L 25°C
Naudé (1928) - L 10 to 18°C
Nernst and Orthmann (1926) - L 16°C
Nernst and Orthmann (1927) - L 18°C
Nernst and Orthmann (1928) - L 18°C
Perreu (1934a) - L 17°C
Plake (1932) - L 20°C
Poczopko and Orzeszko (1973) - L 25°C
Robinson and Wallace (1941) - L 25°C
Thomsen (1883b) - L 18°C

$Zn(NO_3)_2$

Chauvenet (1938) - C 15°C
Drakin, Lantukhova and Karapet'yants (1967) - C 25°C
Marignac (1878) - C 20 to 52°C
Ewing, Brandner and Guyer (1939) - L 25°C
Thomsen (1883b) - L 18°C
Ewing and Fisher (1937) - V 20 to 60°C

$CdCl_2$

Drucker (1934) - C 19°C
Krestov and Abrosimov (1967) - C 0 to 100°C
Vasil'ev and Burlai (1977) - C 25°C
Harned and Fitzgerald (1936) - E 0 to 40°C
Quintin (1935a) - E 0 to 45°C
Quintin (1936) - E 0 to 45°C
Quintin (1935b) - E temperature not given

$CdCl_2$ (continued)

Drucker (1931) - L 18°C

Robinson and Wallace (1942) - L 15 to 25°C

$Cd(ClO_4)_2$

Latysheva and Andreeva (1975) - C 25°C

Spitzer, Singh, Olofsson and Hepler (1978) - C 25°C

Berg and Vanderzee (1978) - L 25°C

Lilich and Chernykh (1966) - L 25°C

$CdBr_2$

Bates (1939) - E 5 to 40°C

Ishikawa and Ueda (1933) - E 20 to 52°C

Robinson and Wallace (1942) - L 15 to 25°C

CdI_2

Cohen, Helderman and Moesveld (1924a) - C 19°C

Cohen, Helderman and Moesveld (1924b and c) - C 19°C

Bates (1941) - E 5 to 40°C

Bates and Vosburgh (1937) - E 25 to 35°C

Robinson and Wallace (1942) - L 15 to 25°C

$CdSO_4$

Cohen and Moesveld (1920) - C 19°C

Cohen, Helderman and Moesveld (1920) - E 15 to 25°C

LaMer and Parks (1933) - E 0 to 30°C

Dunkleberger and Robinson (1938) - L 10 to 20°C

Lange and Monheim (1933) - L 25°C

Lange, Monheim and Robinson (1933) - L 25°C

Plake (1932) - L 20°C

Robinson and Wallace (1941) - L 10 to 25°C

$Cd(NO_3)_2$

Drakin, Lantukhova and Karapet'yants (1967) - C 25°C

Drucker (1934) - C 19°C

Spitzer, Singh, McCurdy and Hepler (1978) - C 25°C

Ewing, Brandner and Guyer (1939) - L 25°C

Yatsimirskii and Shutkov (1954) - L 25°C

Braunstein and Braunstein (1971) - V 100 to 150°C

Ewing and Guyer (1938) - V 20 to 75°C

Kovyrzina, Sidorova, Zhakharova and Berg (1966) - V 40 to 70°C

$HgCl_2$

Blümcke (1884) - C temperature not given

Jauch (1921) - C temperature not given

$Hg(NO_3)_2$

Yatsimirskii and Shutov (1954) - L 25°C

$CuCl_2$

Marignac (1878) - C 19 to 51°C

Vasil'ev, Karapet'yants, Sanaev and Novikov (1974) - C 25°C

Fedorov and Sil'chenko (1937) - H 23°C

Berthelot (1873c) - L temperature not given

Partington and Soper (1929) - L 25°C

Reicher and Van Deventer (1910) - L 18°C

Thomsen (1883b) - L 18°C

$Cu(ClO_4)_2$

Spitzer, Singh, McCurdy and Hepler (1978) - C 25°C

Shchukarev, Orlova and Borisova (1960) - H 25°C

Gier and Vanderzee (1975) - L 25°C

$CuSO_4$

Kapustinsky, Yakushevskii and Drakin (1953a) - C 25°C

Marignac (1878) - C 18 to 53°C

Pagliani (1880) - C 12 to 17°C

Podgornaya (1960) - C 18 to 75°C

Vaillant (1905) - C 15°C

Quintin (1933) - E 0 to 45°C

Quintin (1934) - E temperature not given

Quintin and Lebettre (1934) - E 0 to 45°C

Wetmore and Gordon (1937) - E 15 to 45°C

Fedorov and Sil'chenko (1937) - H 23°C

$CuSO_4$ (continued)

Berthelot (1873c) - L 18°C
Birnthaler and Lange (1937) - L 25°C (D_2O)
Birnthaler and Lange (1938) - L 25°C (D_2O)
Lange and Monheim (1933) - L 25°C
Lange, Monheim and Robinson (1933) - L 25°C
Perreu (1929b) - L 11°C
Perreu (1929a) - L 11°C
Perreu (1929c) - L 12°C
Plake (1932) - L 20°C
Robinson and Wallace (1941) - L 25°C
Scholz (1892) - L 0°C
Thomsen (1883b) - L 18°C

$Cu(NO_3)_2$

Kapustinsky and Stakhanova (1958) - C 0 to 25°C
Marignac (1878) - C 18 to 50°C
Berthelot (1873c) - L temperature not given
Thomsen (1883b) - L 18°C

AgF

Jahn-Held and Jellinek (1936) - C 25°C
Jahn-Held and Jellinek (1936) - L 25°C

$AgClO_4$

Drakin and Yu-min (1964) - H 25°C
Jackson, Smith, Gatty and Wolfenden (1934) - L 25°C
Singh, Spitzer, McKay, McCurdy and Hepler (1978) - C 25°C

$AgNO_3$

Kapustinsky, Yakushevsky and Drakin (1953a) - C 25°C
Sergeeva, Drakin and Karapet'yants (1970b) - C 18 to 32°C
Jackson, Smith, Gatty and Wolfenden (1934) - L 25°C
Singh, Spitzer, McKay, McCurdy and Hepler (1978) - C 25°C
Stearn, Parker, Peak and Volland (1963) - L 25°C
Wagman and Kilday (1973) - L 25°C
Campbell, Fishman, Rutherford, Schaefer and Ross (1956) - V 30 to 105°C
Kangro and Groeneveld (1962) - V 20 to 25°C

$NiCl_2$

Kapustinsky, Yakushevskii and Drakin (1953a) - C 25°C
Karapet'yants, Vasil'ev and Sanaev (1977) - C 25°C
Marignac (1878) - C 24 to 55°C
Spitzer, Singh, McCurdy and Hepler (1978) - C 25°C
Vasil'ev and Sanaev (1973) - C 25°C
Plake (1932) - L 0 to 20°C
Thomsen (1883b) - L 18°C

$Ni(ClO_4)_2$

Spitzer, Singh, Olofsson and Hepler (1978) - C 25°C
Gier and Vanderzee (1974a) - L 25°C
Shchukarev, Borisova and Orlova (1960) - H 25°C
Latysheva and Karavan (1968) - H 25 to 45°C

$NiSO_4$

Marignac (1878) - C 25 to 55°C
Perreu (1934b) - C 20°C
Goldberg, Riddell, Wingard, Hopkins, Wulff and Hepler (1966) - H 25°C
Lange and Miederer (1956a) - L 25°C
Perreu (1934b) - L 15°C
Plake (1932) - L 20°C

$Ni(NO_3)_2$

Marignac (1878) - C 24 to 55°C
Perreu (1941b) - C 12°C
Perreu (1941b) - L 12°C

$CoCl_2$

Galinker and Belova (1963) - C 25 to 300°C
Kapustinsky, Yakushevskii and Drakin (1953a) - C 25°C
Mishchenko and Podgornaya (1961) - C 2 to 75°C

$CoCl_2$ (continued)

Spitzer, Singh, McCurdy and Hepler (1978) - C 25°C

Vasil'ev, Sanaev and Karapet'yants (1973) - C 25°C

Mishchenko and Podgornaya (1961) - H 2 to 75°C

$Co(ClO_4)_2$

Spitzer, Singh, Olofsson and Hepler (1978) - C 25°C

Shchukarev, Borisova and Orlova (1960) - H 25°C

Gier and Vanderzee (1974a) - L 25°C

$FeCl_2$

Karapet'yants, Vasil'ev and Sanaev (1977) - C 25°C

Perreu (1941b) - C 12°C

Vasil'ev, Sanaev and Karapet'yants (1973) - C 25°C

Perreu (1941b) - L 12°C

$FeCl_3$

Blümcke (1884) - C 15 to 18°C

Kangro and Flügge (1935) - C 20°C

Roth and Flügge (1931) - C 20°C

Roth, Umbach and Chall (1930) - H 97°C

Kangro and Flügge (1935) - L 20°C

Sabatier (1881b) - L 18°C

$Fe(ClO_4)_2$

Hugus and Latimer (1951) - L 25°C

$Fe(NO_3)_3$

Myasnikova, Drakin, Karapet'yants and Lantukhova (1968) - C 25°C

$FeSO_4$

Agde and Holtmann (1926) - C 25 to 45°C

Berthelot (1873c) - L temperature not given

$Fe(NO_3)_2$

Berthelot (1873c) - L temperature not given

$Pd(ClO_4)_2$

Izatt, Eatough, Morgan and Christensen (1970) - E 10 to 40°C

$MnCl_2$

Blümcke (1884) - C temperature not given

Kapustinsky (1942 a and b) - C 25°C

Kaganovich and Mishchenko (1952) - C 25°C

Marignac (1878) - C 19 to 52°C

Voskresenkaya and Ponomereva (1946) - C 25 to 75°C

Kapustinsky (1941) - L 25°C

$Mn(ClO_4)_2$

Spitzer, Singh, Olofsson and Hepler (1978) - C 25°C

Gier and Vanderzee (1974b) - L 25°C

Latysheva and Karavan (1968) - H 25 to 45°C

$MnSO_4$

Marignac (1878) - C 19 to 51°C

Perreu (1934a) - L 17°C

Plake (1932) - L 20°C

Van Deventer and Van destadt (1891) - L 18°C

$Mn(NO_3)_2$

Drakin, Lantukhova and Karapet'yants (1967) - C 25°C

Marignac (1878) - C 17 to 52°C

Thomsen (1883b) - L 18°C

$MnCO_3$

Kapustinsky (1941) - H 20°C

$Zn(MnO_4)_2$

Kapustinsky and Samoilov (1946) - C 25°C

Re_2O_7

Roth and Becker (1932) - L 20°C

$HReO_4$

Ahluwalia and Cobble (1964a) - C 0 to 100°C

H_2CrO_4

Büchner and Prins (1912) - C 15°C

Marignac (1878) - C 21 to 53°C

Büchner and Prins (1912) - L 15°C

$Cr(ClO_4)_3$

Vanderzee and King (in press) - L 25°C

$Cr(NO_3)_3$

Myasnikova, Drakin, Karapet'yants and Lantukhova (1968) - C 25°C

$Tm(NO_3)_3$

Baker (1971) - C 25°C

Spedding, Derer, Mohs and Rard (1976) - L 25°C

$Tm(C_2H_5SO_4)_3$

Staveley, Markham and Jones (1968) - L 25°C

$ErCl_3$

Krestov, Kobenin and Semenovskii (1973) - C 14 to 50°C

Spedding and Jones (1966) - C 25°C

Spedding and Flynn (1954) - H 25°C

$Er(ClO_4)_3$

Baker (1971) - C 25°C

Spedding, Baker and Walters (1975) - C 25°C

Spedding, Mohs, Derer and Habenschuss (1977) - L 25°C

$Er(BrO_3)_3$

Staveley, Markham and Jones (1968) - L 25°C

$Er(NO_3)_3$

Spedding, Derer, Mohs and Rard (1976) - L 25°C

$Er(C_2H_5SO_4)_2$

Staveley, Markham and Jones (1968) - L 25°C

$HoCl_3$

Spedding, Walters and Baker (1975) - C 25°C

Spedding, Csejka and DeKock (1966) - L 25°C

Spedding, DeKock, Pepple and Habenschuss (1977) - L 25°C

$Ho(ClO_4)_3$

Baker (1971) - C 25°C

Grenthe, Hessler and Ots (1973) - C 25°C

Spedding, Baker and Walters (1975) - C 25°C

$Ho(BrO_3)_3$

Staveley, Markham and Jones (1968) - L 25°C

$Ho(NO_3)_3$

Baker (1971) - C 25°C

Spedding, Derer, Mohs and Rard (1976) - L 25°C

$Ho(C_2H_5SO_4)_2$

Staveley, Markham and Jones (1968) - L 25°C

$DyCl_3$

Spedding and Jones (1966) - C 25°C

Spedding, Csejka and DeKock (1966) - L 25°C

Spedding, DeKock, Pepple and Habenschuss (1977) - L 25°C

$Dy(ClO_4)_3$

Baker (1971) - C 25°C

Grenthe, Hessler and Ots (1973) - C 25°C

$Dy(ClO_4)_3$ (continued)

Spedding, Baker and Walters (1975) - C 25°C

Spedding, Mohs, Derer and Habenschuss (1977) - L 25°C

$Dy(BrO_3)_3$

Staveley, Markham and Jones (1968) - L 25°C

$Dy(NO_3)_3$

Baker (1971) - C 25°C

Spedding, Derer, Mohs and Rard (1976) - L 25°C

$Dy(C_2H_5SO_4)_3$

Staveley, Markham and Jones (1968) - L 25°C

$TbCl_3$

Krestov, Kobenin and Semenovski (1973) - C 25°C

Spedding, Walters and Baker (1975) - C 25°C

Spedding, Csejka and DeKock (1966) - L 25°C

Spedding, DeKock, Pepple and Habenschuss (1977) - L 25°C

$(NH_4)_2CrO_4$

Marignac (1878) - C 22 to 53°C

$VOSO_4$

Bailey and Larson (1971) - L 25°C

$TiCl_4$

Vasil'ev and Vorob'ev (1969) - H 25°C

$ScCl_3$

Vasil'ev, Novikov and Karapet'yants (1977) - C 25°C

$Sc(ClO_4)_3$

Babakulov and Latysheva (1974) - C 25°C

YCl_3

Karapet'yants, Vasil'ev and Novikov (1976) - C 25°C

Krestov, Kobenin and Semenovskii (1973) - C 14 to 50°C

Spedding and Flynn (1954) - H 25°C

$Y(ClO_4)_3$

Babakulov and Latysheva (1974) - C 25°C

$LuCl_3$

Spedding, Walters and Baker (1975) - C 25°C

Spedding, DeKock, Pepple and Habenschuss (1977) - L 25°C

$Lu(ClO_4)_3$

Spedding, Baker and Walters (1975) - C 25°C

Spedding, Mohs, Derer and Habenschuss (1977) - L 25°C

$Lu(BrO_3)_3$

Staveley, Markham and Jones (1968) - L 25°C

$Lu(NO_3)_3$

Spedding, Derer, Mohs and Rard (1976) - L 25°C

$Lu(C_2H_5SO_4)_3$

Staveley, Markham and Jones (1968) - L 25°C

$YbCl_3$

Spedding and Jones (1966) - C 25°C

Spedding and Flynn (1954) - H 25°C

Spedding, Csejka and DeKock (1966) - L 25°C

$YbCl_3$ (continued)

Spedding, DeKock, Pepple and Habenschuss (1977) - L 25°C

Spedding, Naumann and Eberts (1959) - L 25°C

$Yb(ClO_4)_3$

Baker (1971) - C 25°C

Grenthe, Hessler and Ots (1973 - C 25°C

Spedding, Baker and Walters (1975) - C 25°C

$Yb(BrO_3)_3$

Staveley, Markham and Jones (1968) - L 25°C

$Yb(NO_3)_3$

Baker (1971) - C 25°C

Spedding, Derer, Mohs and Rard (1976) - L 25°C

Spedding, Naumann and Eberts (1959) - L 25°C

$Yb(C_2H_5SO_4)_3$

Staveley, Markham and Jones (1968) - L 25°C

$TmCl_3$

Spedding, Walters and Baker (1975 - C 25°C

Spedding, Csejka and DeKoch (1966) - L 25°C

Spedding, DeKock, Pepple and Habenschuss (1977) - L 25°C

$Tm(ClO_4)_3$

Baker (1971) - C 25°C

Spedding, Baker and Walters (1975) - C 25°C

$Tm(NO_3)_3$

Baker (1971) - C 25°C

Spedding, Derer, Mohs and Rard (1976) - L 25°C

$Tm(C_2H_5SO_4)_3$

Staveley, Markham and Jones (1968) - L 25°C

$ErCl_3$

Krestov, Kobenin and Semenovskii (1973) - C 14 to 50°C

Spedding and Jones (1966) - C 25°C

Spedding and Flynn (1954) - H 25°C

$Er(ClO_4)_3$

Baker (1971) - C 25°C

Spedding, Baker and Walters (1975) - C 25°C

Spedding, Mohs, Derer and Habenschuss (1977) - L 25°C

$Er(BrO_3)_3$

Staveley, Markham and Jones (1968) - L 25°C

$Er(NO_3)_3$

Spedding, Derer, Mohs and Rard (1976) - L 25°C

$HoCl_3$

Spedding, Walters and Baker (1975) - C 25°C

Spedding, Csejka and DeKoch (1966) - L 25°C

Spedding, DeKock, Pepple and Habenschuss (1977) - L 25°C

$Ho(ClO_4)_3$

Baker (1971) - C 25°C

Grenthe, Hessler and Ots (1973) - C 25°C

Spedding, Baker and Walters (1975) - C 25°C

$Ho(BrO_3)_3$

Staveley, Markham and Jones (1968) - L 25°C

$Ho(NO_3)_3$

Baker (1971) - C 25°C

Spedding, Derer, Mohs and Rard (1976) - L 25°C

$Ho(C_2H_5SO_4)_2$

Staveley, Markham and Jones (1968) - L 25°C

$DyCl_3$

Spedding and Jones (1966) - C 25°C

Spedding, Csejka and DeKock (1966) - L 25°C

Spedding, DeKock, Pepple and Habenschuss (1977) - L 25°C

$Dy(ClO_4)_3$

Baker (1971) - C 25°C
Grenthe, Hessler and Ots (1973) - C 25°C
Spedding, Baker and Walters (1975) - C 25°C
Spedding, Mohs, Derer and Habenschuss (1977) - L 25°C

$Dy(BrO_3)_3$

Staveley, Markham and Jones (1968) - L 25°C

$Dy(NO_3)_3$

Baker (1971) - C 25°C
Spedding, Derer, Mohs and Rard (1976) - L 25°C

$Dy(C_2H_5SO_4)_3$

Staveley, Markham and Jones (1968) - L 25°C

$TbCl_3$

Krestov, Kobenin and Semenovski (1973) - C 25°C
Spedding, Walters and Baker (1975) - C 25°C
Spedding, Csejka and DeKock (1966) - L 25°C
Spedding, DeKock, Pepple and Habenschuss (1977) -L 25°C

$Tb(ClO_4)_3$

Baker (1971) - C 25°C
Spedding, Baker and Walters (1975) - C 25°C

$Tb(BrO_3)_3$

Staveley, Markham and Jones (1968) - L 25°C

$Tb(NO_3)_3$

Baker (1971) - C 25°C
Spedding, Derer, Mohs and Rard (1976) - L 25°C

$GdCl_3$

Jekel, Criss and Cobble (1964) - C 0 to 100°C
Spedding, Walters and Baker (1975) - C 25°C
Spedding and Flynn (1954) - H 25°C
Spedding, Csejka and DeKock (1966) - L 25°C
Spedding, DeKock, Pepple and Habenschuss (1977) - L 25°C

$Gd(ClO_4)_3$

Grenthe, Hessler and Ots (1973) - C 25°C
Spedding, Baker and Walters (1975) - C 25°C

$Gd(ClO_3)_3$

Spedding, Mohs, Derer and Habenschuss (1977) - L 25°C

$Gd(BrO_3)_3$

Staveley, Markham and Jones (1968) - L 25°C

$Gd(NO_3)_3$

Spedding, Derer, Mohs and Rard (1976) - L 25°C

$Gd(C_2H_5SO_4)_3$

Staveley, Markham and Jones (1968) - L 25°C

$EuCl_3$

Spedding, Walters and Baker (1975) - C 25°C
Spedding, DeKock, Pepple and Habenschuss (1977) - L 25°C

$Eu(ClO_4)_3$

Spedding, Baker and Walters (1975) - C 25°C

$Eu(BrO_3)_3$

Staveley, Markham and Jones (1968) - L 25°C

$Eu(C_2H_5SO_4)_3$

Staveley, Markham and Jones (1968) - L 25°C

$SmCl_3$

Krestov, Kobenin and Semenovskii (1972) - C 15 to 93°C

Spedding, Walters and Baker (1975) - C 25°C

Spedding and Flynn (1954) - H 25°C

Spedding, Csejka and DeKock (1966) - L 25°C

Spedding, DeKock, Pepple and Habenschuss (1977) - L 25°C

$Sm(ClO_4)_3$

Baker (1971) - C 25°C

Grenthe, Hessler and Ots (1973) - C 25°C

Spedding, Baker and Wlaters (1975) - C 25°C

Spedding, Mohs, Derer and Habenschuss (1977) - L 25°C

$Sm(NO_3)_3$

Baker (1971) - C 25°C

Jauch (1921) - C 18°C

Spedding, Derer, Mohs and Rard (1976) - L 25°C

$Sm(C_2H_5SO_4)_3$

Staveley, Markham and Jones (1968) - L 25°C

$NdCl_3$

Krestov, Kobenin and Semenovskii (1972) - C 15 to 93°C

Spedding and Miller (1952) - C 25°C

Spedding and Jones (1966) - C 25°C

Spedding, DeKock, Pepple and Habenschuss (1977) - L 25°C

Spedding and Miller (1952) - L 25°C

Spedding, Naumann and Eberts (1959) - L 25°C

$Nd(ClO_4)_3$

Spedding, Mohs, Derer and Habenschuss (1977) - L 25°C

Grenthe, Hessler and Ots (1973) - C 25°C

Spedding, Baker and Walters (1975) - C 25°C

$Nd(NO_3)_3$

Spedding, Derer, Mohs and Rard (1976) - L 25°C

$Nd(C_2H_5SO_4)_3$

Staveley, Markham and Jones (1968) - L 25°C

$PrCl_3$

Krestov, Kobenin and Semenovsky (1972) - C 15 to 93°C

Spedding, Walters and Baker (1975) - C 25°C

Spedding and Flynn (1954) - H 25°C

Spedding, Csejka and DeKock (1966) - L 25°C

Spedding, DeKock, Pepple and Habenschuss (1977) - L 25°C

$Pr(ClO_4)_3$

Baker (1971) - C 25°C

Grenthe, Hessler and Ots (1973) - C 25°C

Spedding, Baker and Walters (1975) - C 25°C

Spedding, Mohs, Derer and Habenschuss (1977) - L 25°C

$Pr(BrO_3)_3$

Staveley, Markham and Jones (1968) - L 25°C

$Pr(NO_3)_3$

Baker (1971) - C 25°C

Spedding, Derer, Mohs and Rard (1976) - L 25°C

$Pr(C_2H_5SO_4)_3$

Staveley, Markham and Jones (1968) - L 25°C

$CeCl_3$

Spedding and Miller (1952) - C 25°C

Vasil'ev, Novikov and Karapet'yants (1975) - C 25°C

Spedding and Miller (1952a) - L 25°C

$Ce(NO_3)_3$

Myasnikova, Drakin, Karapet'yants and Lantukhova (1969) - C 25°C

$Ce(C_2H_5SO_4)_3$

Staveley, Markham and Jones (1968) - L 25°C

$LaCl_3$

Krestov, Kobenin and Semenovsky (1972) - C 15 to 93°C

Spedding and Jones (1966) - C 25°C

Spedding and Flynn (1954) - H 25°C

Nathan, Wallace and Robinson (1943) - L 25°C

Spedding, DeKock, Pepple and Habenschuss (1977) - L 25°C

Spedding, Naumann and Eberts (1959) - L 25°C

$La(ClO_4)_3$

Babakulov and Latysheva (1974) - C 25°C

Grenthe, Hessler and Ots (1973) - C 25°C

Spedding, Baker and Walters (1975) - C 25°C

Spedding, Mohs, Derer and Habenschuss (1977) - L 25°C

Vanderzee and Nutter (1974) - L 25°C

$La_2(SO_4)_3$

Nathan, Wallace and Robinson (1943) - L 25°C

$La(NO_3)_3$

Drucker (1934) - C 18°C

Jauch (1921) - C 18°C

Myasnikova, Drakin, Karapet'yants and Lantukhova (1968) - C 25°C

Lange and Miederer (1956b) - L 25°C

Spedding, Derer, Mohs and Rard (1976) - L 25°C

Spedding, Naumann and Eberts (1959) - L 25°C

$La(Fe(CN)_6)$

Lange and Miederer (1956b) - L 25°C

$La(C_2H_5SO_4)_3$

Staveley, Markham and Jones (1968) - L 25°C

UO_2Cl_2

Kapustinsky and Lipilina (1955) - C 25°C

UO_2SO_4

Bailey and Larson (1971) - L 25°C

Soldano and Patterson (1962) - V 25 to 120°C

$UO_2(NO_3)_2$

Kapustinsky and Lipilina (1955) - C 25°C

Lange and Miederer (1957b) - L 25°C

Katzin, Simon and Ferraro (1952) - H 25°C

$UO_2(C_2H_3O_2)_2$

Salman and White (1957) - L 25°C

$ThCl_4$

Jauch (1921) - C 18°C

$Th(NO_3)_4$

Apelblat and Sahar (1975) - C 25°C

Morss and McCue (1976) - C 15 to 35°C

Apelblat and Sahar (1975) - L 25°C

Fricke and Lüke (1929) - L 20°C

Lange and Miederer (1957b) - L 25°C

Apelblat, Azoulay and Sahar (1973) - V 25 to 45°C

$BeCl_2$

Karapet'yants, Vasil'ev and Fedyainov (1969) - C

Vasil'ev, Fedyainov, Karapet'yants and Serafimova (1971) - C 25°C

$Be(SO_4)$

Kapustinsky, Yakushevskii and Drakin (1953a) - C 25°C

Birnthaler and Lange (1937) - L 25°C (D_2O)

Birnthaler and Lange (1938) - L 25°C (D_2O)

$Be(NO_3)_2$

Drucker (1934) - C 18°C

Jauch (1921) - C 18°C

$MgCl_2$

D'Ans and Tollert (1937) - C 20 to 86°C

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Drucker (1934) - C 19°C

Eigen and Wicke (1951) - C 10 to 130°C

Fedyainov, Vasil'ev and Karapet'yants (1970) - C 25°C

Gerlach (1926) - C 0 to 100°C

Karapet'yants, Vasil'ev and Fedyainov (1969) - C 25°C

Koch (1922) - C -30 to 50°C

Küpper (1920) - C 20 to 100°C

Likke and Bromley (1973) - C 80 to 200°C

Marignac (1878) - C 18 to 52°C

Mishchenko and Ponomareva (1952) - C 25°C

Nikolaeva, Kogan and Ogorodnikov (1936) - C 25°C

Perron, Desnoyers and Millero (1974) - C 25°C

Rutskov (1946) - C 25 to 75°C

Rutskov (1948) - C 25 to 75°C

Vasil'ev, Fedyainov and Kurenkov (1973) - C 25°C

Voskresenskaya and Ponomareva (1946) - C 25 to 75°C

Voskresenskaya and Rutskov (1940) - C 25 to 70°C

Zdanovskii and Matsenok (1938) - C 25°C

Brönsted (1906) - L -20°C

Dunnington and Hoggard (1899) - L 25°C

Fricke and Lüke (1929) - L 20°C

Fricke and Havestadt (1927) - L 0 to 10°C

Lange and Streeck (1931a) - L 25°C

Mayrath and Wood (1978) - L 100 to 200°C

Newman (1955) - L 25°C

Snipes, Manly and Ensor (1975) - L 40 to 80°C

Thomsen (1883b) - L 18°C

Vichutinskii and Golikov (1978) - L 25°C

Mishchenko and Yakovlev (1959) - H -6 to 2°C

Lindsay and Liu (1968) - V 125 to 300°C

Serowy and Soika (1964) - V 20 to 45°C

Fricke and Lüke (1929) - V 0 to 15°C

$Mg(ClO_4)_2$

Latysheva and Andreeva (1975) - C 25°C

Spitzer, Singh, McCurdy and Hepler (1978) - C 25°C

Drakin and Yu-min (1964) - H 25°C

Nosova (1966) - H 25°C

Jongenburger and Wood (1965) - L 25°C

$MgBr_2$

Jauch (1921) - C 18°C

Lange and Streeck (1931a) - L 25°C

$MgSO_4$

Bindel (1890) - C temperature not given

D'Ans and Tollert (1937) - C 20 to 86°C

Drucker (1934) - C 17°C

Gerlach (1926) - C 14 to 90°C

Kaganovich and Mishchenko (1951) - C 25 to 45°C

Küpper (1920) - C 20 to 100°C

Likke and Bromley (1973) - C 80 to 200°C

Marignac (1878) - C 19 to 52°C

Pagliani (1880) - C 12 to 21°C

Perreu (1935a) - C 20°C

Thomsen (1883a) - C 18°C

Voskresenskaya and Yankovskaya (1945) - C 25 to 50°C

Bindel (1890) - L temperature not given

Lange and Messner (1927 a and b) - L 25°C

Lange and Monheim (1933) - L 25°C

Lange and Streeck (1931b) - L 25°C

Mayrath and Wood (1978) - L 100 to 200°C

Perreu (1930) - L 11°C

$MgSO_4$ (continued)

Plake (1932) - L 20°C

Poczoplo and Orzeszko (1972) - L 25°C

Snipes, Manly and Ensor (1975) - L 40 to 80°C

Thomsen (1883b) - L 18°C

Kangro and Groeneveld (1962) - V 20 to 25°C

Soldano and Patterson (1962) - V 25 to 120°C

$Mg(NO_3)_2$

Drakin, Lantukhova and Karapet'yants (1967) - C 25°C

Drucker (1934) - C 19°C

Marignac (1878) - C 17 to 52°C

Dunnington and Hoggard (1899) - L 25°C

Ewing, Glick and Rasmussen (1942) - L 25°C

Ewing, Klinger and Brandner (1934) - L 25°C

Hammerschmid and Lange (1932) - L 15°C

Lange and Streeck (1931b) - L 25°C

Thomsen (1883b) - L 18°C

Ewing, Klinger and Brandner (1934) - V 20 to 60°C

Mashovets, Baron and Zavodnaya (1966) - V 40 to 100°C

$Mg_2(Fe(CN)_6)$

Lange and Miederer (1956b) - L 25°C

$CaCl_2$

Chernen'kaya and Bratach (1975) - C 25 to 90°C

D'Ans and Tollert (1937) - C 20°C

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Dickinson, Mueller and George (1909) - C -35 to 20°C

Drecker (1888) - C 18 to 22°C

Drucker (1934) - C 19°C

Fedyainov, Vasil'ev and Karapet'yants (1970) - C 25°C

Karapet'yants, Vasil'ev and Fedyainov (1970) - C 25°C

Karapet'yants, Vasil'ev and Fedyainov (1969) - C 25°C

Marignac (1878) - C 20 to 51°C

Mishchenko and Ponomareva (1952) - C 25°C

Nernst and Orthmann (1926) - C 16°C

Perron, Desnoyers and Millero (1974) - C 25°C

Person (1851) - C 0 to 20°C

Richards and Dole (1929) - C 20 to 25°C

Rutskov (1946) - C 25 to 75°C

Rutskov (1948) - C 25 to 75°C

Shields (1951) - C -20 to 25°C

Spitzer, Singh, McCurdy and Hepler (1978) - C 25°C

Varasova, Mishchenko and Frost (1937) - C 25°C

Mussini and Pagella (1971) - E 25 to 70°C

Brönsted (1906) - L 16 to 22°C

Dunnington and Hoggard (1899) - L 25°C

Harrison and Perman (1927) - L 40 to 80°C

Hunter and Bliss (1944) - L 30°C

Lange and Streeck (1931a) - L 25°C

Leung and Millero (1975) - L 30°C

Nernst and Orthmann (1927) - L 18°C

Nernst and Orthmann (1928) - L 18°C

Plake (1932) - L 0 to 20°C

Richards and Dole (1929) - L 20 to 25°C

Rümelin (1907) - L 14°C

Thomsen (1883b) - L 18°C

Tucker and Callendar (1915) - L 20°C

Van Deventer and Van destadt (1891) - L 18°C

Van Deventer and Van destadt (1892) - L 15°C

Bechtold and Newton (1940) - V 25 to 45°C

Jakli, Chan and Van Hook (1975) - V 0 to 90°C

Jakli and Van Hook (1972) - V 0 to 90°C

$Ca(ClO_4)_2$

Latysheva and Andreeva (1975) - C 25°C

Spitzer, Singh, Olofsson and Hepler (1978) - C 25°C

Drakin and Yu-min (1964) - H 25°C

Gier and Vanderzee (1974b) - L 25°C

Lilich and Chernykh (1966) - L 25°C

$CaBr_2$

Lange and Streeck (1931a) - L 25°C

$CaSO_4$

Lange and Messner (1927a and b) - L 25°C

Lange and Monheim (1930b) - L 25°C

$CaSO_4$ (continued)

Lange and Monheim (1933) - L 25°C

Lange and Streeck (1931b) - L 25°C

CaS_2O_3

Bichowsky (1923) - C 25°C

Bichowsky (1923) - L 25°C

Nernst and Orthmann - L 16°C

$Ca(NO_3)_2$

Drucker (1934) - C 19°C

Krestov and Abrosimov (1967) - C 0 to 100°C

Marignac (1878) - C 20 to 51°C

Ewing, Rogers, Miller and McGovern (1932) - H 25°C

Scholle and Brunclikova (1968) - H 25°C

Dunnington and Hoggard (1899) - L 25°C

Ewing and Rogers (1933) - L 25°C

Lange and Messner (1927a and b) - L 25°C

Lange and Streeck (1931b) - L 25°C

Nernst and Orthmann (1926) - L 16°C

Nernst and Orthmann (1927) - L 18°C

Nernst and Orthmann (1928) - L 18°C

Partington and Soper (1929) - L 25°C

Plake (1932) - L 20°C

Rümelin (1907) - L 14°C

Yatsimirskii and Karacheva (1959) - L 25°C

$Ca_3(Fe(CN)_6)_2$

Lange and Miederer (1957c) - L 25°C

$Ca_2Fe(CN)_6$

Lange and Miederer (1957c) - L 25°C

$Ca(MnO_4)_2$

Kapustinsky and Klokman (1943) - C 25°C

$SrCl_2$

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Fedyainov, Vasil'ev and Karapet'yants (1970) - C 25°C

Kapustinsky and Dezideryeva (1946) - C 25°C

Karapet'yants, Vasil'ev and Fedyainov (1969) - C 25°C

Krestov and Abrosimov (1967) - C 0 to 100°C

Magie (1907) - C temperature not given

Marignac (1878) - C 20 to 51°C

Perron, Desnoyers and Millero (1974) - C 25°C

Pickering (1887) - C 0 to 25°C

Vasil'ev, Fedyainov, Karapet'yants and Serafimova (1971) - C 25°C

Mishchenko and Stagis (1970) - H 0 to 45°C

Longhi, Mussini and Vaghi (1975) - E 10 to 70°C

Dunnington and Hoggard (1899) - L 25°C

Lange and Streeck (1931a) - L 25°C

Leung and Millero (1975) - L 30°C

Magie (1912) - L 4 to 24°C

Pratt (1918) - L 0 to 25°C

Stearn and Smith (1920) - L temperature not given

$Sr(ClO_4)_2$

Latysheva and Andreva (1975) - C 25°C

Drakin and Yu-min (1965) - L 25°C

Jongenburger and Wood (1965) - L 25°C

$SrBr_2$

Lange and Streeck (1931a) - L 25°C

$Sr(NO_3)_2$

Magie (1907) - C 25°C

Marignac (1878) - C 21 to 51°C

Pickering (1887) - C 0 to 25°C

Sergeeva, Drakin and Karapet'yants (1970b) - C 18 to 32°C

Shpakova, Drakin and Karapet'yants (1973) - C 12 to 38°C

Ewing and Rogers (1933) - L 25°C

Hammerschmid and Lange (1932) - L 15°C

Lange and Streeck (1931b) - L 25°C

Pratt (1918) - L 0 to 35°C

Thomsen (1883b) - L 18°C

$SrCO_3$

Pickering (1887) - C 0 to 25°C

$Sr_2Fe(CN)_6$

Lange and Miederer (1957c) - L 25°C

$Sr_3(Fe(CN)_6)_2$

Lange and Miederer (1957c) - L 25°C

$Ba(OH)_2$

Ginzburg, Kochkalda and Ved' (1976) - C 25 to 79°C

$BaCl_2$

Blümcke (1889) - C temperature not given

Criss and Cobble (1961) - C 0 to 100°C

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Drucker (1934) - C 19°C

Fedainov, Vasil'ev and Karapet'yants (1970) - C 25°C

Ginzburg and Kochkalda (1976) - C 25 to 150°C

Karapet'yants, Vasil'ev and Fedyainov (1969) - C 25°C

Magie (1907) - C temperature not given

Marignac (1878) - C 20 to 51°C

Perron, Desnoyers and Millero (1974) - C 25°C

Richards and Dole (1929) - C 20 to 25°C

Schwartz and Coblans (1936) - C 25°C

Urban (1932) - C 10 to 40°C

Varasova, Mishchenko and Frost (1937) - C 25°C

Vasil'ev, Fedyainov and Kurenkov (1973) - C 25°C

Ardizonne, Longhi, Mussini and Rondinini (1976) - E 10 to 70°C

Tippetts and Newton (1934) - E 0 to 45°C

Fedorov and Sil'chenko (1937) - H 23°C

Schwartz and Coblans (1936) - H 25°C

Lange and Streeck (1931a) - L 25°C

Leung and Millero (1975) - L 30°C

Magie (1912) - L 7, 16 and 24°C

Perreu (1929b) - L 11°C

Pratt (1918) - L 0 to 35°C

Richards and Dole (1929) - L 20 to 25°C

Smith, Stearn and Schneider (1920) - L temperature not given

Bechtold and Newton (1940) - V 25, 35 and 45°C

Soldano and Patterson (1962) - V 25 to 120°C

$Ba(ClO_4)_2$

Latysheva and Andreeva (1975) - C 25°C

Drakin and Yu-min (1964) - H 25°C

Vanderzee and Swanson (1972) - L 25°C

$BaBr_2$

Lange and Streeck (1931a) - L 25°C

$BaSO_4$

Muller (1918) - L 14 to 38°C

$Ba(NO_3)_2$

Drucker (1934) - C 19°C

Magie (1907) - C 25°C

Marignac (1878) - C 21 to 51°C

Sergeeva, Drakin and Karapet'yants (1970b) - C 18 to 32°C

Birnthaler and Lange (1937) - L 25°C (D_2O)

Birnthaler and Lange (1938) - L 25°C (D_2O)

Bishop (1908) - L 25°C

Hammerschmid and Lange (1932) - L 15°C

Lange and Streeck (1931b) - L 25°C

Pratt (1918) - L 0 to 35°C

VonStackelberg (1898) - L 16°C

$Ba_3(Fe(CN)_6)_2$

Lange and Miederer (1956b) - L 25°C

$RaCl_2$

Karapet'yants, Vasil'ev and Fedyainov (1971) - C 25°C

Karapet'yants, Vasil'ev and Fedyainov (1969) - C 25°C

LiOH

Gucker and Schminke (1933) - C 25°C

Richards and Rowe (1913a and b) - C 16 to 20°C

Rossini (1931b) - C 18°C

Richards and Rowe (1921) - L 16 to 20°C

Rossini (1931a) - L 18°C

Ueda (1933a) - L 25°C

LiF

Vasil'ev and Shevchenko (1970) - C 25°C

Cox and Harrop (1965) - H 25°C

Lange and Leighton (1931) - L 25°C

Lange and Meixner (1929a) - L 25°C

$LiHF_2$

Cox and Harrop (1965) - H 25°C

LiCl

Bennewitz and Kratz (1936) - C 20°C

Bonner and Cerutti (1976) - C 25°C (D_2O)

Chernyak (1938) - C 25 to 50°C

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Drucker (1934) - C 18°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Gucker and Schminke (1932) - C 25°C

Hüttig and Wehling-Jena (1926) - C 3 to 40°C

Jauch (1921) - C 18°C

Kapustinsky, Stakhanova and Vasil'ev (1960) - C 25°C

Krestov and Abrosimov (1967) - C 0 to 100°C

Lange and Dürr (1926) - C 25°C

Richards and Rowe (1921) - C 16 to 20°C

Rossini (1931b) - C 18°C

Rüterjans, Schreiner, Sage and Ackermann (1969) - C 30 to 130°C

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

Drakin and Yu-min (1964) - H 25°C

Birnthaler and Lange (1938) - L 25°C (D_2O)

Dunnington and Hoggard (1899) - L 25°C

Fortier, Leduc and Desnoyers (1974) - L 25°C

Johnson and Molstad (1951) - L 30 to 70°C

Joly, Tourey and Pérachon (1973) - L 25°C

Lange and Dürr (1926) - L 25°C

Lange and Messner (1927a and b) - L 25°C

Lemoine (1897) - L 10°C

Mayrath and Wood (1978) - L 100 to 200°C

Naudé (1928) - L 0 to 25°C

Nernst and Orthmann (1926) - L 16°C

Nernst and Orthmann (1927) - L 18°C

Nernst and Orthmann (1928) - L 18°C

Richards and Rowe (1921) - L 16 to 20°C

Rossini (1931) - L 18°C

Tucker and Callendar (1915) - L 20°C

Vaslow (1971) - L 25°C

Vichutinskii and Golikov (1978) - L 25°C

Wood, Rooney and Braddock (1969) - L 25°C (D_2O)

Wu and Friedman (1966a) - L 25°C (D_2O)

Braunstein and Braunstein (1971) - V 100 - 150°C

Johnson and Molstad (1951) - V 30 to 70°C

Kangro and Groeneveld (1962) - V 20 to 25°C

Lindsay and Liu (1968) - V 125 to 275°C

Lindsay and Liu (1971) - V 125 to 275°C

Pupezin, Jakli, Jancso and Van Hook (1972) - V -5 to 100°C

$LiClO_3$

Jauch (1921) - C 18°C

Campbell and Bhatnagar (1972) - L 25°C

$LiClO_4$

Drakin and Yu-min (1964) - H 25°C

Austin and Mair (1962) - L 25°C

Jones and Wood (1963) - L 25°C

LiBr

Birnthaler and Lange (1938) - L 25°C (D_2O)

Fortier, Leduc and Desnoyers (1974) - L 25°C

Joly, Thourey and Pérachon (1973) - L 25°C

Lange (1959) - L 25°C

Lange (1928) - L 25°C

Lange and Messner (1927a and b) - L 25°C

Lange and Mishchenko (1930) - L 25°C

Lange and Schwartz (1928) - L 25°C

Marcus (1975) - L 25°C

LiBr (continued)

Pennington (1955) - L 25°C

Rosenfel'd and Karnaukh (1958) - L 0 to 120°C

Vaslow (1971) - L 25°C

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Eigen and Wicke (1951) - C 10 to 130°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Fortier, Philip and Desnoyers (1974) - C 25°C (D_2O)

Jauch (1921) - C 18°C

Lange and Schwartz (1928) - C 26°C

Rossini (1931b) - C 18°C

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

Braunstein and Braunstein (1971) - V 100 to 150°C

Löwer (1961) - V 0 to 180°C

LiI

Jauch (1921) - C 18°C

Rossini (1931b) - C 18°C

Vasil'ev and Shevchenko (1972) - C 25°C

Vasil'ev and Shevchenko (1970) - C 25°C

Joly, Thourey and Pérachon (1973) - L 25°C

Lange, Monheim and Streeck (1931) - L 25°C

$LiIO_3$

Jauch (1921) - C 18°C

Li_2SO_4

Thompson, Smith and Wood (1974) - L 25°C

Lange and Streeck (1931b) - L 25°C

Ueda (1933b) - L 25°C

$LiNO_3$

Chauvenet (1938) - C 15°C

Drucker (1934) - C 18°C

Richards and Rowe (1921) - C 16 to 20°C

Rossini (1931b) - C 18°C

Shpakova, Drakin and Karapet'yants (1973) - C 12 to 38°C

Richards and Rowe (1921) - L 16 to 20°C

Rossini (1931a) - L 18°C

Braunstein and Braunstein (1971) - V 100 to 150°C

Campbell, Fishman, Rutherford, Schaefer and Ross (1956) - V 30 to 105°C

Kangro and Groeneveld (1962) - V 20 to 25°C

$LiAlH_4$

Davis, Mason and Stegeman (1949) - L 25°C

NaOH

Ackermann (1957) - C temperature not given

Ackermann (1958) - C 10 to 210°C

Bertetti and McCabe (1936b) - C 5 to 30°C

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Ginzburg (1962) - C 350°C

Gucker and Schminke (1933) - C 25°C

Magie (1907) - C temperature not given

Perron, Desnoyers and Millero (1975) - C 25°C

Richards and Gucker (1925) - C 16 to 20°C

Richards and Hall (1929a and b) - C 18°C

Richards and Rowe (1913a and b) - C 16 to 20°C

Rossini (1931b) - C 18°C

Roth, Wirths and Berendt (1942) - C 20 to 80°C

Singh, Woolley, McCurdy and Hepler (1976) - C 25°C

Thomsen (1883a) - C 18°C

Wilson and McCabe (1942) - C 25 to 130°C

Akerlof and Kegeles (1940) - E 0 to 70°C

Harned and Hecker (1933) - E 0 to 40°C

Shibata and Murata (1937) - E 20 to 30°C

Bertetti and McCabe (1936a) - L 18°C

Berthelot (1875b) - L 10 to 24°C

Berthelot (1875d) - L 10°C

Berthelot (1875f) - L 10 to 15°C

Berthelot (1875 ℓ) - L 10°C

Calvet (1933) - L 17°C

Fricke and Lüke (1929) - L 20°C

Fricke and Havestadt (1927) - L 0 to 10°C

Ginzburg (1962) - L 330 to 500°C

Haltenberger (1939) - L 5 to 90°C

Hayward and Perman (1931) - L 20 to 60°C

Pyan and Perman (1929) - L 22 to 70°C

Pratt (1918) - L 0 to 35°C

Richards and Gucker (1929) - L 20°C

Richards and Hall (1929b) - L 20°C

Richards and Rowe (1908a and b) - L 16°C

Richards and Rowe (1921) - L 16 to 20°C

Rossini (1931a) - L 18°C

Roth, Wirths and Berendt (1942) - L 19 to 80°C

Sabatier (1879) - L 17°C

Sturtevant (1940b) - L 25°C

Thomsen (1883b) - L 18°C

Tucker and Callendar (1915) - L 20°C

Wilson and McCabe (1942) - L 90°C

Dibrov, Mal'tsev and Mashovets (1964) - V 25 to 350°C

Fricke and Havestadt (1927) - V 0 to 10°C

Kangro and Groeneveld (1962) - V 20 to 25°C

Kiyama and Kitahara (1957) - V 200 to 500°C

Krumgal'z and Mashovets (1964) - V 150 to 400°C

Mashovets, Dibrov and Krumgal'z (1965) - V 150 to 400°C

Mashovets, Krumgal'z and Dibrov (1965) - V 150 to 350°C

Mashovets, Puchkova and Matveeva (1967) - V 0 to 300°C

NaOD

Goldberg and Hepler (1968) - L 25°C (D_2O)

NaF

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Fortier, Philip and Desnoyers (1974) - C 25°C (D_2O)

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

Fortier, Leduc and Desnoyers (1974) - L 25°C

Leung and Millero (1975) - L 30°C

Lange, Monheim and Streeck (1931) - L 25°C

Nuttall, Churney and Kilday (1978) - L 25°C

NaCl

Ackermann (1958) - C 10 to 120°C

Blaszkowska (1924) - C temperature not given

Blümcke (1884) - C 14 to 17°C

Bonner and Cerutii (1976) - C 25°C (D_2O)

Borodenko and Galinker (1975) - C ∿300°C

Borodenko and Galinker (1976) - C 200 to 300°C

Bousfield and Bousfield (1919) - C 7 to 40°C

Chernen'kaya (1971b) - C 25°C

Chernen'kaya and Bratash (1975) - C 35 to 90°C

Chipman, Johnson and Maass (1929) - C 18 to 25°C

D'Ans and Tollert (1937) - C 20 to 26°C

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Drucker (1934) - C 18°C

Eigen and Wicke (1951) - C 10 to 130°C

Epikhin and Stakhanova (1967) - C 25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Fortier, Philip and Desnoyers (1974) - C 25°C (D_2O)

Gardner, Mitchell and Cobble (1969) - C 100 to 200°C

Gerlach (1926) - C 15 to 90°C

Grenthe, Hessler and Ots (1973) - C 25°C

Gulbransen and Robinson (1934) - C 10 to 25°C

Hess (1941) - C 25°C

Hess and Gramkee (1940) - C 15 to 45°C

Kaganovich and Mischenko (1952) - C 25°C

Leitner (1928) - C 25 to 100°C

Leitner (1931) - C 23 to 100°C

Likke and Bromley (1973) - C 80 to 200°C

Liphard, Jost and Schneider (1977) - C 20°C

Lipsett, Johnson and Maass (1927) - C 25°C

Lipsett, Johnson and Maass (1927b) - C 20 to 25°C

Magie (1907) - C temperature not given

Marignac (1878) - C 16 to 52°C

Nikolaeva, Kogan and Ogorodnikov (1936) - C 25°C

Perron, Fortier and Desnoyers (1975) - C 0 to 45°C

Person (1851) - C 0 to 20°C

Picker, Leduc, Philip and Desnoyers (1971) - C 25°C

Pickering (1887) - C 0 to 25°C

Puchkov, Styazhkin and Fedorov (1976) - C 25 to 350°C

Randall and Bisson (1920) - C 25°C

Randall and Ramage (1927) - C 25°C

Randall and Rossini (1929) - C 25°C

Richards and Gucker (1925) - C 18°C

Richards and Rowe (1921) - C 16 to 20°C

Rossini (1931b) - C 18 to 25°C

Rutskov (1946) - C 25 to 75°C

Rutskov (1948) - C 25 to 75°C

Shields (1951) - C 0 to 25°C

Singh, Woolley, McCurdy and Hepler (1976) - C 25°C

Stakhanova and Vasil'ev (1960) - C 25°C

Stakhanova and Vasil'ev (1963) - C 25°C

Tanner and Lamb (1978) - C 5 to 85°C

Thomsen (1883) - C 18°C

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

Voskresenskaya and Ponomareva (1946) - C 25 to 75°C

Voskresenskaya and Rutskov (1940) - C 25 to 75°C

Voskresenskaya and Yankovskaya (1945) - C 25 to 50°C

White (1940) - C 18 to 25°C

Winklemann (1873) - C 17 to 46°C

Young and Machin (1936) - C 25°C

Zdanovskii and Matsenok (1938) - C 25°C

Allmand and Polack (1939) - E 18 to 25°C

Harned and Nims (1932) - E 0 to 40°C

Janz and Gordon (1943) - E 15 to 45°C

Truesdell (1968) - E 15 to 50°C

Abrosimov, Ionov and Krestov (1977) - H 25°C

Arnett and Campion (1970) - H 6 to 48°C

Benjamin (1963) - H 25°C

Benson and Benson (1955) - H 25°C

Brönsted (1906) - H 18°C

Chipman, Johnson and Maass (1929) - H ~22°C

Craft and Van Hook (1975) - H 10 to 75°C (D_2O)

Lipsett, Johnson and Maass (1927a) - H 25°C

Lipsett, Johnson and Maass (1927b) - H 20 to 25°C

Mishchenko and Yakovlev (1959) - H 2 to 6°C

Scholz (1892) - H 0°C

Anderson, Malcolm and Parton (1960) - L 25°C

Backlund (1911) - L 17°C

Bindel (1890) - L temperature not given

Birch and Hall (1972) - L 25°C

Birnthaler and Lange (1937) - L 25°C (D_2O)

Birnthaler and Lange (1938) - L 25°C (D_2O)

Craft and Van Hook (1975) - L 5 to 75°C (D_2O)

Dunnington and Hoggard (1899) - L 25°C

Ensor and Anderson (1973) - L 40 to 80°C

Fortier, Leduc and Desnoyers (1974) - L 25°C

Fortier, Leduc, Picker and Desnoyers (1973) - L 25°C

Gulbransen and Robinson (1934) - L 10 to 25°C

Joly, Thourey and Pérachon (1973) - L 25°C

Lange (1959) - L 25°C

Lange and Messner (1927a and b) - L 25°C

Lange and Robinson (1931) - L 25°C

Leitner (1928) - L 20 to 100°C

Magie (1912) - L 17 to 27°C

Messikomer and Wood (1975) - L 25 to 100°C

Naudé (1928) - L 18°C

Naudé (1927) - L 18°C

Pratt (1918) - L 0 to 35°C

Randall and Bisson (1920) - L 25°C

Richards and Rowe (1921) - L 16 to 20°C

Robinson (1932) - L 25°C

Rossini (1931a) - L 18°C

Rümelin (1907) - L 14°C

Sandonnini and Gerosa (1925) - L temperature not given

Scholz (1892) - L 0°C

Smith, Stearn and Schneider (1920) - L temperature not given

Stearn and Smith (1920) - L temperature not given

Thomsen (1883b) - L 18°C

Van Deventer and Van destadt (1891) - L 18°C

Van Deventer and Van destadt (1892) - L 18°C

Vichutinskii and Golikov (1978) - L 25°C

Von Stackelberg (1898) - L 16°C

Wood, Rooney and Braddock (1969) - L 25°C to (D_2O)

Wu and Friedman (1966a) - L 25°C (D_2O)

Wüst and Lange (1924) - L 25°C

Wüst and Lange (1925) - L 25°C

Young and Machin (1936) - L 25°C

Young and Vogel (1932) - L 25°C

Gardner (1969) - V 125 to 270°C

Gardner, Jones and de Nordwall (1963) - V 125 to 270°C

Gibbard, Scatchard, Rousseau and Creek (1974) - V 25 to 100°C

Keevil (1942) - V 183 to 700°C

Kovryrzina, Sidorova, Zakharova and Berg (1966) - V 25 to 90°C

Liu and Lindsay (1970) - V 125 to 130°C

Liu and Lindsay (1972) - V 75 to 300°C

Lindsay and Liu (1968) - V 125 to 300°C

Lindsay and Liu (1968) - V 125 to 300°C (D_2O)

Lindsay and Liu (1971) - V 125 to 300°C

Mashovets, Zarembo and Fedorov (1973) - V 150 to 350°C

Olynyk and Gordon (1943) - V 20 to 30°C

Pupezin, Jakli, Jansco and Van Hook (1972) - V -5 to 100°C

Robinson (1939) - V 0 to 60°C

$NaClO_3$

Colomina and Nicolás (1949) - C 24°C

Epikhin and Stakhanova (1967) - C 25°C

Roux, Musbally, Perron, Desnoyers, Singh, Woolley and Hepler (1978) - C 25°C

Colomina and Nicolás (1949) - L 25°C

Lange and Robinson (1930) - L 25°C

$NaClO_4$

Bonner and Cerutti (1976) - C 25°C (D_2O)

Colomina and Nicolás (1949) - C 25°C

Mastroianni and Criss (1972b) - C 0 to 90°C

Roux, Musbally, Perron, Desnoyers, Singh, Woolley and Hepler (1978) - C 25°C

Singh, McCurdy, Woolley and Hepler (1977) - C 25°C

Drakin and Yu-min (1964) - H 25°C

Grenthe, Hessler and Ots (1973) - H 25°C

Austin and Mair (1962) - L 25°C

Colomina and Nicolás (1949) - L 25°C

Jackson, Smith, Gatty and Wolfenden (1934) - L 25°C

Kasner (1962) - L 25°C

Lange (1959) - L 25°C

Vanderzee and Swanson (1963) - L 25°C

Vanderzee and Swanson (1963b) - L 25°C

NaBr

Bender and Kaiser (1954) - C 25°C and 30°C

Chipmann, Johnson and Maass (1929) - C 18 to 25°C

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Fortier, Philip and Desnoyers (1974) - C 25°C (D_2O)

Jauch (1921) - C 18°C

Marignac (1878) - C 20 to 52°C

Randall and Rossini (1929) - C 25°C

Rossini (1931b) - C 25°C

Singh, Woolley, McCurdy and Hepler (1976) - C 25°C

Tanner and Lamb (1978) - C 5 to 85°C

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

Chipman, Johnson and Maass (1929) - H ∿22°C

Craft and Van Hook (1975) - H 10 to 75°C (D_2O)

Dunnington and Hoggard (1899) - L 25°C

Hammerschmid and Lange (1931) - L 25°C

Hammerschmid and Robinson (1932) - L 25°C

Joly, Thourey and Pérachon (1973) - L 25°C

Leung and Millero (1975) - L 30°C

Mayrath and Wood (1978) - L 100 to 200°C

Van Deventer and Van destadt (1892) - L 16°C

Vaslow (1971) - L 25°C

Wallace (1949) - L 25°C

Wood, Rooney and Braddock (1969) - L 25°C (D_2O)

Wüst and Lange (1924) - L 25°C

Wüst and Lange (1925) - L 25°C

Jakli, Chan and Van Hook (1975) - V 0 to 90°C

Jakli and Van Hook (1972) - V 0 to 90°C

Keevil (1942) - V 293 to 678°C

Mashovets, Zarembo and Fedorov (1973) - V 150 to 350°C

$NaBrO_3$

Roux, Musbally, Perron, Desnoyers, Singh, Woolley and Hepler (1978) - C 25°C

Lange and Robinson (1930) - L 25°C

NaI

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Fortier, Philip and Desnoyers (1974) - C 25°C (D_2O)

Jauch (1921) - C 18°C

Marignac (1878) - C 20 to 51°C

Novoselov and Mishchenko (1968) - C 25°C

Novoselov and Mishchenko (1971a) - C 25 to 50°C

Novoselov and Mishchenko (1971b) - C 0.8°C

Novoselov and Mishchenko (1971c) - C 0.8 to 50°C

Randall and Rossini (1929) - C 25°C

Rossini (1931b) - C 25°C

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

Craft and Van Hook (1975) - H 10 to 75°C (D_2O)

Lonkevich, Mishchenko and Shadskii (1969) - H 10 to 50°C

Fortier, Leduc and Desnoyers (1974) - L 25°C

Joly, Thourey and Pérachon (1973) - L 25°C

Leung and Millero (1975) - L 30°C

NaI (continued)

Mayrath and Wood (1978) - L 100 to 200°C

Thomsen (1883b) - L 18°C

Vaslow (1971) - L 25°C

Wu and Friedman (1966) - L 25 (D_2O)

Wüst and Lange (1924) - L 25°C

Wüst and Lange (1925) - L 25°C

Jakli, Chan and Van Hook (1975) - V 0 to 90°C

Jakli and Van Hook (1972) - V 0 to 90°C

Keevil (1942) - V 185 to 600°C

Mashovets, Zarembo and Fedorov (1973) - V 150 to 350°C

$NaIO_3$

Roux, Musbally, Perron, Desnoyers, Singh, Woolley and Hepler (1978) - C 25°C

Lange and Robinson (1930) - L 25°C

Na_2S

Sabatier (1881a) - L 17°C

Na_2SO_4

Auméras (1931) - C 20°C

D'Ans and Tollert (1937) - C 20 to 86°C

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Drucker (1934) - C 18°C

Gardner, Jekel and Cobble (1969) - C 0 to 100°C

Gerlach (1926) - C 12 to 100°C

Kaganovich and Mishchenko (1951) - C 25 to 45°C

Kobe and Anderson (1936) - C 34 to 103°C

Likke and Bromley (1973) - C 80 to 200°C

Marignac (1878) - C 19 to 52°C

Olofsson, Spitzer and Hepler (1978) - C 25°C

Pagliani (1880) - C 12 to 23°C

Perreu (1935a) - C 20°C

Perron, Desnoyers and Millero (1975) - C 25°C

Randall and Rossini (1929) - C 25°C

Readnour and Cobble (1969) - C 4 to 95°C

Thomsen (1883a) - C 18°C

Voskresenskaya and Yankovskaya (1945) - C 25 to 50°C

Wallace and Robinson (1941) - C 25°C

Harned and Hecker (1934) - E 0 to 40°C

Shibata and Murata (1931) - E 22 to 31°C

Shibata, Murata and Toyoda (1931) - E 22 to 31°C

Shibata, Oda and Furukawa (1930a and b) - E 20 to 30°C

Shibata, Oda and Furakawa (1933) - E 20 to 30°C

Gritsus, Akhumov and Zhilina (1971) - H 10 to 50°C

Gritsus, Akhumov and Zhilina (1969) - H 25°C

Brodale and Giauque (1958) - L 25°C

Gritsus, Akhumov and Zhilina (1971) - L 10 to 50°C

Lange and Messner (1927a and b) - L 25°C

Lange and Streeck (1931b) - L 25°C

Mayrath and Wood (1978) - L 100 to 200°C

Perreu (1929b) - L 11°C

Perreu (1929a) - L 11°C

Perreu (1935b) - L 20°C

Plake (1932) - L 0 to 20°C

Snipes, Manly and Ensor (1975) - L 40 to 80°C

Thomsen (1883b) - L 18°C

Thompson, Smith and Wood (1974) - L 25°C

Vichutinskii and Golikov (1978) - L 25°C

Wallace and Robinson (1941) - L 25°C

Jakli, Chan and Van Hook (1975) - V 0 to 90°C

Kangro and Groeneveld (1962) - V 20 to 25°C

Keevil (1942) - V 158 to 367°C

Lindsay and Liu (1968) - V 125 to 300°C

Soldano and Patterson (1962) - V 25 to 120°C

$Na_2S_2O_3$

Kapustinsky and Stakhanova (1958) - C 0 to 25°C

Olofsson, Spitzer and Hepler (1978) - C 25°C

Perreu (1930) - C 14 to 34°C

Perreu (1930) - L 11°C

Plake (1932) - L 0 to 20°C

$Na_2S_2O_8$

Olofsson, Spitzer and Hepler (1978) - C 25°C

$NaHSO_4$

Thomsen (1883b) - L 18°C

$NaNO_2$

Cases, Parker and Kilday (1977) - L 25°C

$NaNO_3$

Bonner and Cerutti (1976) - C 25°C (D_2O)

Chauvenet (1938) - C 15°C

D'Ans and Tollert (1937) - C 20°C

Drucker (1934) - C 18°C

Enea, Singh, Woolley, McCurdy and Hepler (1977) - C 25°C

Epikhin and Stakhanova (1967) - C 25°C

Gerlach (1926) - C 16 to 90°C

Magie (1907) - C 25°C

Marignac (1878) - C 18 to 52°C

Mondain-Monval (1923) - C 0 to 16°C

Puchkov, Matveeva and Baranova (1973) - C 25 to 340°C

Randall and Rossini (1929) - C 25°C

Richards and Gucker (1925) - C 18°C

Richards and Rowe (1921) - C 16 to 20°C

Rossini (1931b) - C 18 to 25°C

Roux, Musbally, Perron, Desnoyers, Singh, Woolley and Hepler (1978) - C 25°C

Thomsen (1883) - C 18°C

Voskresenskya and Ponomareva (1946) - C 25 to 75°C

Winkelmann (1873) - C 1 to 60°C

Mishchenko and Shpigel (1967) - H 1 to 75°C

Bindel (1890) - L temperature not given

Bishop (1908) - L 25°C

Dunnington and Hoggard (1889) - L 20 to 25°C

Lange (1959) - L 25°C

Lange and Robinson (1930) - L 25°C

Mondain-Monval (1925) - L 16°C

Mondain-Monval (1923b) - L 16°C

Naudé (1928) - L 11 to 18°C

Naudé (1927) - L 18°C

Pratt (1918) - L 0 to 35°C

Richards and Rowe (1921) - L 16 to 20°C

Rossini (1931) - L 18°C

Rümelin (1907) - L 14°C

Scholtz (1892) - L 0°C

Stahlberg (1914) - L 18°C

Thomsen (1883b) - L 18°C

Van Deventer and Van destadt (1891) - L 18°C

Van Deventer and Van destadt (1892) - L 17°C

Von Stackelberg (1898) - L 0 to 16°C

$Na_4P_2O_7$

Perreu (1940b) - C 18°C

Perreu (1940b) - L 18°C

Sodium polyphosphate

Mita, Okubo and Ise (1975) - L 25°C

NaH_2PO_4

D'Ans and Tollert (1937) - C 20°C

Marignac (1878) - C 24 to 55°C

Na_2HPO_4

Marignac (1878) - C 23 to 54°C

Perreu (1929b) - L 11°C

Perreu (1929a) - L 11°C

$NaPF_6$

Bonner and Cerutti (1976) - C 25°C (D_2O)

Na_2HAsO_4

Marignac (1878) - C 25 to 56°C

Na_2CO_3

Bindel (1890) - C temperature not given

Chernen'kaya (1971a) - C 25°C

Chernen'kaya and Bratash (1972) - C 35°C and 50°C

Chernen'kaya and Bratash (1975) - C 60°C and 90°C

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Ginzburg and Kochkalda (1972a) - C 200°C

Marignac (1878) - C 21 to 52°C

Perron, Desnoyers and Millero (1975) - C 25°C

Swallow and Alty (1931) - C 17 to 98°C

Thomsen (1883a) - C 18°C

Taylor (1955) - E 15 to 95°C

Donnan and Hope (1909) - H temperature not given

Ginzburg and Kochkalda (1972a) - H 25 to 200°C

Berg and Vanderzee (1978) - L 25°C

Na_2CO_3 (continued)

Leung and Millero (1975) - L 30°C
Perreu (1929b) - L 11°C
Perreu (1929a) - L 11°C
Rümelin (1907) - L 16°C
Swallow and Alty (1931) - L 30°C
Thomsen (1883b) - L 18°C
Keevil (1942) - V 112 to 388°C

$NaHCO_3$

Chernen'kaya (1971a) - C 25°C
Chernen'kaya and Bratash (1972) - C 35°C and 50°C
Chernen'kaya and Bratash (1975) - C 60°C and 90°C
Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C
Perreu (1940a) - C 18°C
Perron, Desnoyers and Millero (1975) - C 25°C
Berg and Vanderzee (1978) - L 25°C
Leung and Millero (1975) - L 30°C
Perreu (1940a) - L 18°C

NaSCN

Partington and Soper (1929) - H 25°C
Partington and Soper (1929) - L 25°C

$NaBO_2$

Sidorova, Puchkov and Fedorov (1975) - C 25 to 300°C

$Na_3Fe(CN)_6$

Lange and Secrest (1957) - L 25°C

$NaReO_4$

Ahluwalia and Cobble (1964a) - C 0 to 100°C

Na_2CrO_4

Marignac (1878) - C 21 to 52°C

Na_2MoO_4

Olofsson, Spitzer and Hepler (1978) - C 25°C

Na_2WO_4

Olofsson, Spitzer and Hepler (1978) - C 25°C

KOH

Gawlik (1935) - C 20°C
Ginzburg, Kochkalda and Guba (1973) - C 25 to 250°C
Gucker and Schminke (1932) - C 25°C
Magie (1907) - C temperature not given
Puchkov, Baranova and Lapidus (1970) - C 25 to 400°C
Richards and Hall (1929a) - C 18°C
Richards and Rowe (1913a and b) - C 16 to 20°C
Rossini (1931b) - C 18°C
Singh, Woolley, McCurdy and Hepler (1976) - C 25°C
Thomsen (1883) - C 18°C
Voskresenskaya and Ponomereva (1946) - C 25 to 75°C
Akerlof and Bender (1948) - E 0 to 70°C
Harned and Cook (1937a) - E 0 to 35°C
Berthelot (1875b) - L 11 to 24°C
Berthelot (1875d) - L 10°C
Berthelot (1875f) - L 10 to 15°C
Biermann (1960) - L 25°C
Pratt (1918) - L 0 to 35°C
Richards and Rowe (1921) - L 16 to 20°C
Rossini (1931a) - L 18°C
Thomsen (1883b) - L 18°C
Kangro and Groeneveld (1962) - V 20 to 25°C
Mashovets, Krumgal'z, Dibrov and Matveeva (1965) - V 150 to 400°C

KF

Bonner and Cerutti (1976) - C 25°C (D_2O)
Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C
Epikhin, Stakhanova and Karapet'yants (1966) - C 25°C
Fortier, Leduc and Desnoyers (1974) - C 25°C
Fortier, Philip and Desnoyers (1974) - C 25°C (D_2O)
Jauch (1921) - C 18°C

KF (continued)

Rüterjans, Schreiner, Sage and Ackermann (1969) - C 30 to 130°C

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

Birnthaler and Lange (1937) - L 25°C (D_2O)

Birnthaler and Lange (1938) - L 25°C (D_2O)

Lange (1928b) - L 25°C

Lange and Eichler (1927) - L 25°C

Jakli, Chan and Van Hook (1975) - V 0 to 90°C

Jakli and Van Hook (1972) - V 0 to 90°C

KCl

Barnes and Maass (1930) - C -78 to 0°C

Bonner and Cerutti (1976) - C 25°C (D_2O)

Borodenko and Galinker (1975) - C ∿ 300°C

Borodenko and Galinker (1976) - C 200 to 300°C

Bousfield and Bousfield (1919) - C 7 to 39°C

Chipman, Johnson and Maass (1929) - C 18 to 25°C

Clews (1936) - C 25°C

Cohen and Moesveld (1920) - C 19°C

Colson (1915) - C 5 to 21°C

D'Ans and Tollert (1937) - C 20 to 86°C

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Drecker (1888) - C 18 to 22°C

Drucker (1934) - C 18°C

Epikhin, Stakhanova and Karapet'yants (1964) - C 25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Grenthe, Hessler and Ots (1973) - C 25°C

Gucker (1928) - C 25 to 80°C

Hess and Gramkee (1940) - C 15 to 45°C

Kaganovich and Mischenko (1952) - C 25°C

Kapustinsky, Stakhanova and Vasil'ev (1960) - C 25°C

Kapustinsky, Yakushevskii and Drakin (1953a) - C 25°C

Klopov, Kolker and Krestov (1972) - C 25°C

Klopov, Kolker and Krestov (1974) - C 25°C

Koch (1922) - C -30 to 50°C

Küpper (1920) - C 20 to 100°C

Lange and Monheim (1929) - C 12 to 25°C

Likke and Bromley (1973) - C 80 to 200°C

Magie (1907) - C temperature not given

Marignac (1878) - C 17 to 22°C

Mondain-Monval (1923) - C 0 to 18°C

Nikolaeva, Kogan and Ogorodnikov (1936) - C 25°C

Pickering (1887) - C 0 to 25°C

Popoff, Bundel and Choller (1930) - C 20°C

Randall and Bisson (1920) - C 25°C

Randall and Rossini (1929) - C 25°C

Richards and Rowe (1921) - C 16 to 20°C

Rossini (1931b) - C 18 to 25°C

Rüterjans, Schreiner, Sage and Ackermann (1969) - C 30 to 130°C

Rutskov (1946) - C 25 to 75°C

Rutskov (1948) - C 25 to 75°C

Rüterjans, Schreiner, Sage and Ackermann (1969) - C 30 to 130°C

Singh, Woolley, McCurdy and Hepler (1976) - C 25°C

Stakhanova, Epikhin and Kharapet'yants (1963) - C 25°C

Stakhanova and Vasil'ev (1960) - C 25°C

Tanner and Lamb (1978) - C 5 to 85°C

Thomsen (1883a) - C 18°C

Tuech and Combet (1976) - C 25°C

Urban (1932) - C 10 to 40°C

Vasil'ev and Shevehenko (1972) - C 25°C

Vasil'ev and Shevchenko (1970) - C 25°C

Voskresenskaya and Ponomareva (1946) - C 25 to 75°C

Voskresenskaya and Rutskov (1940) - C 25 to 75°C

White (1940) - C 18 to 25°C

Winkelman (1873) - C 1 to 60°C

Harned and Cook (1937b) - E 0 to 40°C

Hornibrook, Janz and Gordon (1942) - E 15 to 45°C

Shibata, Oda and Furukawa (1930b) - E 20 to 32°C

Abrosimov, Ionov and Krestov (1977) - H 25°C

Chipman, Johnson and Maass (1929) - H ∿22°C

Cox and Harrop (1965) - H 25°C

Craft and Van Hook (1975) - H 10 to 75°C (D_2O)

Fedorova and Silchenko (1937) - H 23°C

Fontell (1938) - H 25°C

Partington and Soper (1929) - H 25°C

Scholtz (1892) - H 0°C

Bishop (1908) - L 25°C

Craft and Van Hook (1975) - L 10 to 75°C (D_2O)

Dunnington and Hoggard (1899) - L 25°C

Harrison and Perman (1927) - L 40 to 80°C

Joly, Thourey and Pérachon (1973) - L 25°C

Lange (1928b) - L 12 to 25°C

Lange and Leighton (1928) - L 12 to 25°C

Lange and Messner (1927a and b) - L 11 to 25°C

KCl (continued)

Lange and Monheim (1929) - L 12 to 25°C

Lange and Monheim (1930b) - L 12 to 25°C

Magie (1912) - L 3 to 21°C

Mayrath (1979) - L 100 to 200°C

Mishchenko (1930) - L 25°C

Naudé (1928) - L 12 to 18°C

Naudé (1927) - L 18°C

Nernst and Orthmann (1926) - L 16°C

Nernst and Orthmann (1927) - L 18°C

Nernst and Orthmann (1928) - L 18°C

Partington and Soper (1929) - L 25°C

Pratt (1918) - L 0 to 35°C

Richards and Rowe (1921) - L 16 to 20°C

Rossini (1931a) - L 18°C

Rümelin (1907) - L 14°C

Sandonnini and Gerosa (1925) - L temperature not given

Scholtz (1892) - L 0°C

Snipes, Manly and Ensor (1975) - L 40 to 80°C

Stearn and Smith (1920) - L temperature not given

Van Deventer and Van destadt (1891) - L 15°C

Van Deventer and Van destadt (1892) - L 18°C

Von Stackelberg (1898) - L 16°C

Vorob'ev, Monaenkova and Pashlova (1978) - L 25°C (D_2O)

Wood, Rooney and Braddock (1969) - L 25°C (D_2O)

Wüst and Lange (1924) - L 25°C

Wüst and Lange (1925) - L 25°C

Pupezin, Jakli, Jancso and Van Hook (1972) - V 20 to 100°C

Shibata and Niwa (1935) - V 0 to 10°C

Soldano and Patterson (1962) - V 25 to 120°C

$KClO_3$

Roux, Musbally, Perron, Desnoyers, Singh, Woolley and Hepler (1978) - C 25°C

Andauer and Lange (1933) - L 15 to 25°C

Von Stackelberg (1898) - L 16°C

$KClO_4$

Andauer and Lange (1933) - L 15 to 25°C

Lange and Hesse (1931) - L 25°C

KBr

Bender and Kaiser (1954) - C 25 to 30°C

Chipman, Johnson and Maass (1929) - C 18 to 25°C

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Fortier, Philip and Desnoyers (1974) - C 25°C

Klopov, Kolker and Krestov (1975) - C 25°C

Krestov and Abrosimov (1967) - C 0 to 100°C

Marignac (1878) - C 20 to 51°C

Randall and Rossini (1929) - C 25°C

Rossini (1931b) - C 25°C

Singh, Woolley, McCurdy and Hepler (1976) - C 25°C

Stakhanova, Epikhin and Karapet'yants (1963) - C 25°C

Urban (1932) - C 10 to 40°C

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

Brönsted (1906) - H 18°C

Chipman, Johnson and Maass (1929) - H ∼22°C

Fedorov and Sil'chenko (1937) - H 23°C

Birnthaler and Lange (1937) - L 25°C (D_2O)

Birnthaler and Lange (1938) - L 25°C (D_2O)

Dunnington and Hoggard (1899) - L 25°C

Hammerschmid and Lange (1931) 25°C

Hammerschmid and Robinson (1932) - L 25°C

Joly, Thourey and Pérachon (1973) - L 25°C

Rümelin (1907) - L 12°C

Scholz (1892) - L 0°C

Thomsen (1883b) - L 18°C

Wüst and Lange (1924) - L 25°C

Wüst and Lange (1925) - L 25°C

$KBrO_3$

Roux, Musbally, Perron, Desnoyers, Singh, Woolley and Hepler (1978) - C 25°C

Kasner (1962) - L 25°C

Von Stackelberg (1898) - L 16°C

KI

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Drucker (1934) - C 18°C

Epikhin, Stakhanova and Karapet'yants (1966) - C 25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

$KBrO_3$

Marignac (1878) - C 20 to 51°C

Randall and Rossini (1929) - C 25°C

Rossini (1931b) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

Vasil'ev and Shevchenko (1970) - C 25°C

Abrosimov, Ionov and Krestov (1977) - H 25°C

Dunnington and Hoggard (1899) - L 25°C

Joly, Thourey and Pérachon (1973) - L 25°C

Lange, Monheim and Streeck (1931) - L 25°C

Scholz (1892) - L 0°C

Vorob'ev, Monaenkova and Pashlova (1978) - L 25°C (D_2O)

Wüst and Lange (1924) - L 25°C

Wüst and Lange (1925) - L 25°C

KIO_3

Randall and Taylor (1941) - C 25°C

Roux, Musbally, Perron, Desnoyers, Singh, Woolley and Hepler (1978) - C 25°C

Kasner (1962) - L 25°C

Von Stackelberg (1898) - L 16°C

K_2S

Sabatier (1881a) - L 17°C

K_2SO_4

D'Ans and Tollert (1937) - C 20 to 41°C

Desnoyer, DeVisser, Perron and Picker (1976) - C 25°C

Drucker (1934) - C 18°C

Marignac (1878) - C 19 to 52°C

Mishchenko and Pronina (1936) - C 20 to 25°C

Mondain-Monval (1923a) - C 0 to 18°C

Olofsson, Spitzer and Hepler (1978) - C 25°C

Perron, Desnoyers and Millero (1975) - C 25°C

Randall and Rossini (1929) - C 25°C

Murata (1932) - E 22 to 31°C

Shibata, Oda and Furukawa (1930a) - E 20 to 30°C

Shibata, Oda and Furukawa (1933) - E 20 to 30°C

Brönsted (1911) - H 18°C

Gritsus, Akhumov and Zhalina (1971) - H 10 to 50°C

Scholz (1892) - H 0°C

Shmalin and Shidlovskii (1971) - H 25°C

Gritsus, Akhumov and Zhilina (1971) - L 10 to 50°C

Lange and Streeck (1931b) - L 25°C

Mayrath and Wood (1978) - L 100 to 200°C

Plake (1932) - L 0 to 20°C

Rümelin (1907) - L 14°C

Scholz (1892) - L 0°C

$KHSO_4$

Randall and Taylor (1941) - C 25°C

Thomsen (1883b) - L 18°C

KNO_3

Chauvenet (1938) - C 15°C

Colson (1915) - C 5 to 18°C

D'Ans and Tollert (1937) - C 41 to 86°C

Drucker (1934) - C 18°C

Enea, Singh, Woolley, McCurdy and Hepler (1977) - C 25°C

Epikhin, Stakhanova and Karapet'yants (1964) - C 25°C

Gerlach (1926) - C 12 to 100°C

Gucker (1928) - C 25 to 80°C

Magie (1907) - C temperature not given

Marignac (1878) - C 18 to 52°C

Mondain-Monval (1923a) - C 0 to 18°C

Pickering (1887) - C 0 to 25°C

Puchkov, Matveeva and Baranova (1973) - C 25 to 340°C

Randall and Rossini (1929) - C 25°C

Richards and Gucker (1925) - C 18°C

Richards and Rowe (1921) - C 16 to 20°C

Rossini (1931b) - C 18 to 25°C

Roth and Eymann (1929) - C 15 to 50°C

Rutskov (1946) - C 25 to 75°C

Rutskov (1948) - C 25 to 75°C

Thomsen (1883a) - C 18°C

Voskresenskaya and Ponomereva (1946) - C 25 to 75°C

Winkelman (1873) - C 4 to 60°C

Berenger-Calvet (1927) - H 11 to 16°C

Fedorov and Sil'chenko (1937) - H 23°C

Khrenova and Akhumov (1969) - H 18 to 25°C

Mishchenko and Shpigel' (1967) - H 1 to 75°C

Roth and Eymann (1929) - H 15 to 50°C

KNO_3

Shmagin and Shidlovskii (1971) - H 25°C

Bishop (1908) - L 25°C

Hunter and Bliss (1944) - L 30°C

Lange (1959) - L 25°C

Lange (1928) - L 25°C

Lange and Messner (1927a and b) - L 25°C

Lange and Monheim (1930b) - L 12 to 25°C

Naudé (1928) - L 0 to 30°C

Naudé (1927) - L 18°C

Nernst and Orthmann (1926) - L 16°C

Nernst and Orthmann (1927) - L 18°C

Nernst and Orthmann (1928) - L 18°C

Poczopko and Mecik (1971) - L 25°C

Richards and Rowe (1921) - L 16 to 20°C

Rossini (1931a) - L 18°C

Roth and Eymann (1929) - L 21°C

Rümelin (1907) - L 13°C

Scholz (1892) - L 0°C

Von Stackelberg (1898) - L 15°C

K_3PO_4

Khomyakov, Yavorovskaya and Shirokikh (1933) - L 22°C

KH_2PO_4

Rutskov (1946) - C 25 to 75°C

Voskresenskaya and Rutskov (1940) - C 25 to 75°C

Egan and Luff (1963) - H 25°C

Chomjakow, Jaworowskaja and Schirokich (1933) - L 23°C

Khomyakov, Yavorovskaya and Shirokikh (1933) - L 22°C

Perreu (1940b) - L 18°C

K_2HPO_4

D'Ans and Tollert (1937) - C 41°C

Luff and Reed (1978) - H 25°C

Khomyakov, Yavorovskaya and Shirokikh (1933) - L 22°C

Luff and Reed (1978) - L 25°C

K_2CO_3

Ginzburg and Kochkalda (1972b) - C 25 to 250°C

Marignac (1878) - C 21 to 52°C

Ginzburg and Kochkalda (1972b) - L 300°C

Rümelin (1907) - L 15°C

Thomsen (1883b) - L 18°C

Puchkov and Kurochkina (1970) - V 25 to 90°C

KCN

Thomsen (1883b) - L 18°C

KNCO

Vanderzee and Myers (1961) - L 25°C

KSCN

Urban (1932) - C 10 to 40°C

Partington and Soper (1929) - H 25°C

Hunter and Bliss (1944) - L 30°C

Partington and Soper (1929) - L 25°C

$K_3Co(CN)_6$

Hepler, Sweet and Jesser (1960) - H 25°C

$K_3Fe(CN)_6$

Hepler, Sweet and Jesser (1960) - H 25°C

Lange and Miederer (1956a) - L 25°C

$K_4Fe(CN)_6$

Lange and Miederer (1956a) - L 25°C

$KMnO_4$

Kapustinsky and Klokman (1943) - C 25°C

Perreu (1940b) - C 10 to 20°C

Perreu (1940b) - L 18°C

Roth and Becker (1932) - L 16 to 21°C

K_2ReCl_6

Busey, Dearman and Bevan (1962) - H 25°C

K_2CrO_4

Faasch (1977a) - C 18°C

Marignac (1878) - C 20 to 51°C

Olofsson, Spitzer and Hepler (1978) - C 25°C

Roth and Schwartz (1928) - L 18°C

Terasaki (1957) - L temperature not given

$K_2Cr_2O_7$

Shmagin and Shidlovskii (1971) - L 25°C

$K_2S_2O_8$

Olofsson, Spitzer and Hepler (1978) - C 25°C

RbOH

Vorob'ev (1965) - L 25°C

RbF

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Fortier, Philip and Desnoyers (1974) - C 25°C (D_2O)

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

Fortier, Leduc and Desnoyers (1974) - L 25°C

Lange and Monheim (1930b) - L 25°C

RbCl

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Myasnikova, Drakin and Karapet'yants (1969) - C 25°C

Sergeeva, Drakin and Karapet'yants (1970a) - C 20 to 32°C

Vasil'ev and Shevchenko (1972) - C 25°C

Vasil'ev and Shevchenko (1970) - C 25°C

Abrosimov, Ionov and Krestov (1977) - H 25°C

Vorob'ev, Ibragin and Skuratov (1966) - H 25°C

Fortier, Leduc and Desnoyers (1974) - L 25°C

Lange, Monheim and Streeck (1931) - L 25°C

Leung and Millero (1975) - L 30°C

Vichutinskii and Golikov (1978) - L 25°C

RbBr

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Fortier, Philip and Desnoyers (1974) - C 25°C (D_2O)

Jauch (1921) - C 18°C

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

Fortier, Leduc and Desnoyers (1974) - L 25°C

RbI

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

Fortier, Leduc and Desnoyers (1974) - L 25°C

Rb_2SO_4

Vorob'ev, Ibragin and Skuratov (1966) - H 25°C

Lange and Streeck (1931b) - L 25°C

$RbNO_3$

Krestov and Abrosimov (1967) - C 0 to 100°C

Chauvenet (1938) - L 15°C

Vichutinskii and Golikov (1978) - L 25°C

Vorob'ev, Ibragin and Skuratov (1966) - H 25°C

RbH_2PO_4

Monaenkova, Kon'kova, Mishchenko and Vorob'ev (1972) - H 25°C

Monaenkova, Kon'kova, Mishchenko and Vorob'ev (1972) - H 25°C (D_2O)

CSOH

Vorob'ev (1965) - L 25°C

CsF

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Fortier, Philip and Desnoyers (1974) - C 25°C (D_2O)

Vasil'ev and Shevchenko (1972) - C 25°C

Vasil'ev and Shevchenko (1970) - C 25°C

Fortier, Leduc and Desnoyers (1974) - L 25°C

CsCl

Bennewitz and Kratz (1936) - C 20°C

Bonner and Cerutti (1976) - C 25°C

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Myasnikova, Drakin and Karapet'yants (1969) - C 25°C

Richards and Rowe (1921) - C 16 to 20°C

Rüterjans, Schreiner, Sage and Ackermann (1969) - C 30 tl 130°C

Sergeeva, Drakin and Karapet'yants (1970a) - C 20 to 32°C

Stakhanova and Vasil'ev (1963) - C 25°C

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

Vorob'ev, Ibragim and Skuratov (1966) - H 25°C

Lange (1928) - L 25°C

Leung and Millero (1975) - L 30°C

Levine and Wood (1970) - L 25°C

Mayrath and Wood (1978) - L 100 to 200°C

Richards and Rowe (1921) - L 16 to 20°C

Stakhanova, Vlasenko, Karapet'yants and Bazlova (1968) - L 25°C

Vichutinskii and Golikov (1978) - L 25°C

Lindsay and Liu (1968) - V 125 to 300°C

Lindsay and Liu (1971) - V 125 to 300°C

Pupezin, Jakli, Jancso and Van Hook (1972) - V -5 to 100°C

Soldano and Patterson (1962) - V 25 to 120°C

CsBr

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Fortier, Philip and Desnoyers (1974) - C 25°C

Jauch (1921) - C 18°C

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

Abrosimov, Ionov and Krestov (1977) - H 25°C

Fortier, Leduc and Desnoyers (1974) - L 25°C

Vorob'ev, Ibragin and Skuratov (1966) - H 25°C

CsI

Bonner and Cerutti (1976) - C 25°C (D_2O)

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Fortier, Leduc and Desnoyers (1974) - C 25°C

Kapustinsky, Lipilina and Samoilov (1957) - C 25°C

Kapustinsky, Lipilina and Samoilov (1956) - C 25°C

Kapustinsky, Yakushevskii and Drakin (1953b) - C 25°C

Mitchell and Cobble (1964) - C 0 to 100°C

Rüterjans, Schreiner, Sage and Ackermann (1969) - C 30 to 130°C

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev ans Shevchenko (1972) - C 25°C

Fortier, Leduc and Desnoyers (1974) - L 25°C

Vorobev, Ibragin and Skuratov (1966) - H 25°C

Cs_2SO_4

Vorobev, Ibragin and Skuratov (1966) - H 25°C

Lange and Streeck (1931b) - L 25°C

$CsNO_3$

Chauvenet (1938) - C 15°C

Jauch (1921) - C 18°C

Richards and Rowe (1921) - C 16 to 20°C

Richards and Rowe (1921) - L 16 to 20°C

FrF*

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

* Data was estimated by authors

FrCl*

Karapet'yants, Vasil'ev and Fedyainov (1971) - C 25°C

Vasil'ev and Shevchenko (1970) - C 25°C

Vasil'ev and Shevchenko (1972) - C 25°C

FrBr*

Vasil'ev and Shevchenko (1972) - C 25°C

Vasil'ev and Shevchenko (1970) - C 25°C

FrI*

Vasil'ev and Shevchenko (1972) - C 25°C

Vasil'ev and Shevchenko (1970) - C 25°C

Organic Compounds

1. Aminoacids

α-alanine

Gucker and Allen (1942) - C 5 to 40°C

Prasad and Ahluwalia (1976) - C 25 to 35°C

Spink and Wadsö (1975) - C 25°C

Zittle and Schmidt (1935) - C 25°C

Benesi, Mason and Robinson (1946) - L 25°C

β-alanine

Gucker and Allen (1942) - C 5 to 40°C

Prasad and Ahluwalia (1976) - C 25 to 35°C

Benesi, Mason and Robinson (1946) - L 25°C

Aminobutyric acids

Prasad and Ahluwalia (1976) - C 25 to 35°C

Spink and Wadsö (1975) - C 25°C

Mason and Robinson (1947) - L 25°C

Aminocaproic acid

Prasad and Ahluwalia (1976) - C 25 to 35°C

ε-Aminocaproic acid

Mason, Offutt and Rboinson (1949) - L 25°C

Amino-n-caprlyic acids

Prasad and Ahluwalia (1976) - C 25 to 35°C

Amino-n-heptanoic acid

Prasad and Ahluwalia (1976) - C 25 to 35°C

Amino valeric acids

Prasad and Ahluwalia (1976) - C 25 to 35°C

Mason, Offutt and Robinson (1949) - L 25°C

Arginine

Zittle and Schmidt (1935) - L 25°C

Asparagine

Prasad and Ahluwalia (1976) - C 25 to 35°C

---

* Data was estimated by authors.

betaine

Ahluwalia, Millero, Goldberg and Hepler (1966) - H 25°C

betaine monohydrate

Ahluwalia, Millero, Goldberg and Hepler (1966) - H 25°C

betaine hydrochloride

Ahluwalia, Millero, Goldberg and Hepler (1966) - H 25°C

Glutamine

Prasad and Ahluwalia (1976) - C 25 to 35°C

Glycine

Gucker, Ford and Moser (1939) - L 5 to 40°C
Kresheck (1970) - C 25°C
Prasad and Ahluwalia (1976) - C 25 to 35°C
Spink and Wadsö (1975) - C 25°C
Zittle and Schmidt (1935) - C 25°C
Gucker, Pickard and Ford (1940) - L 25°C
Sturtevant (1940c) - L 25°C
Wallace, Offutt and Robinson (1943) - L 25°C
Zittle and Schmidt (1935) - L 25°C

Glycylglycine

Kresheck and Benjamin (1964) - C 25°C
Lilley and Scott (1976) - L 25°C

Histidine

Zittle and Schmidt (1935) - L 25°C

Hydroxyproline

Prasad and Ahluwalia (1976) - C 25 to 35°C
Zittle and Schmidt (1935) - L 25°C

lactamide

Gucker and Allen (1942) - C 5 to 40°C

Leucine

Kresheck and Benhamin (1964) - C 25°C
Spink and Wadsö (1975) - C 25°C

Lysine

Zittle and Schmidt (1935) - L 25°C

Methionine

Kresheck (1970) - C 25°C

Norleucine

Mason, Offutt and Robinson (1949) - L 25°C

Norvaline

Kresheck (1970) - C 25°C

Phenylalanine

Kresheck and Benjamin (1964) - C 25°C
Prasad and Ahluwalia (1976) - C 25 to 35°C
Spink and Wadsö (1975) - C 25°C

Proline

Prasad and Ahluwalia (1976) - C 25 to 35°C
Spink and Wadsö (1975) - C 25°C
Zittle and Schmidt (1935) - L 25°C

Pyroglutamine acid

Zittle and Schmidt (1935) - L 25°C

Serine

Prasad and Ahluwalia (1976) - C 25 to 35°C
Spink and Wadsö (1975) - C 25°C
Zittle and Schmidt (1935) - L 25°C

Taurine

Zittle and Schmidt (1935) - L 25°C

Threonine

Prasad and Ahluwalia (1976) - C 25 to 35°C

Valine

Prasad and Ahluwalia (1976) - C 25 to 35°C
Spink and Wadsö (1975) - C 25°C

Zittle and Schmidt (1935) - C 25°C
Mason, Offutt and Robinson (1949) - L 25°C

Polyethylenimine hydrochloride

Mita, Okubo and Ise (1975) - L 25°C

2. Carboxylic Acids

CH_2O_2 [Formic acid]

Ackermann and Schreiner (1958) - C 0 to 130°C
Bury and Davies (1932) - C 13 to 16°C
Glagoleva and Cherbov (1936) - C 25 to 80°C
Konicek and Wadsö (1971) - C 20 to 30°C
Lüdeking (1886) - C 16 to 50°C
Pettersson (1881) - C 0 to 100°C
Faucon (1910) - H 9°C
Karve (1924) - H temperature not given
Bethelot (1875h) - L 10°C
Berthelot (1875ℓ) - L 10°C
Böse (1905) - L temperature not given
Glagoleva (1936) - L 25 to 60°C
Thomsen (1883b) - L 18°C

$C_2H_2O_4$ [Oxalic acid]

Becker and Roth (1934) - L 25°C
Spedding and Miller (1952b) - L 25°C

$C_2H_4O_2$ [Acetic acid]

Ackermann and Schreiner (1958) - C 0 to 130°C
Bury and Davies (1932) - C 13 to 16°C
Klibanova and Neiman (1933) - C 25 to 80°C
Konicek and Wadsö (1971) - C 20 to 30°C
Lüdeking (1886) - C 16 to 50°C
Marignac (1878) - C 21 to 52°C
Neiman (1932) - C 25 to 80°C
Neuman (1932) - C 25 to 80°C
Pettersson (1881) - C 0 to 100°C
Richards and Gucker (1925) - C 16 to 20°C
Stern, Yavuz and Swaringen (1972) - C 18 to 40°C
Vasil'ev, Shevchenko, Fedyainov and Golikov (1977) - C 25°C

Von Reiss (1880) - C 15 to 20°C
Harned and Ehlers (1932) - E 0 to 35°C
Faucon (1910) - H 9°C
Karve (1924) - H temperature not given
Berthelot (1875h) - L 10°C
Berthelot (1875ℓ) - L 10°C
Böse (1905) - L temperature not given
Campbell and Gieskes (1965) - L 25°C
Payn and Perman (1929) - L 22 to 70°C
Richards and Gucker (1929) - L 20°C
Sandonnini (1926) - L 16 to 18°C
Thomsen (1883b) - L 18°C

$C_2H_4O_3$ [Glycolic acid]

DeForcrand (1884a) - L 20°C
Petersen (1893) - L 21°C

$C_2Cl_2O_2H_2$ [Dichloroacetic acid]

Petersen (1893) - L 21°C

$C_2Cl_3O_2H$ [Trichloroacetic acid]

Karve (1924) - H temperature not given

$C_3H_5O_2H$ [Propanoic acid]

Ackermann and Schreiner (1958) - C 0 to 130°C
Bury and Davies (1932) - C 13 to 16°C
Konicek and Wadsö (1971) - C 20 to 30°C
Lüdeking (1886) - C 22 to 50°C
Faucon (1910) - L 9°C

$C_3H_6O_3$ [Lactic acid]

Lange and Miederer (1957a) - L 10 to 25°C
Meyerhof (1922) - L 20°C

$C_4H_6O_6$ [Tartaric acid]

Richards and Gucker (1925) - C 16 to 20°C
Thomsen (1883b) - L 18°C
Wassermann (1930b) - L 18°C

$C_4H_8O_2$ [Butyric acids]

Bury and Davies (1932) - C 13 to 16°C
Konicek and Wadsö (1971) - C 20 to 30°C
Kresheck and Benjamin (1964) - C 25°C
Lüdeking (1886) - C 23 to 50°C
Berthelot (1875h) - L 10°C
Berthelot (1875ℓ) - L 10°C
Daoust and Lajoie (1976) - L 25°C
Faucon (1910) - L 9°C

$C_5H_{10}O_2$ [Valeric acid]

Berthelot (1875h) - L 10°C
Berthelot (1875ℓ) - L 10°C

$C_6H_8O_7$ [Citric acid]

Richards and Gucker (1925) - C 16 to 20°C
Richards and Mair (1929) - L 16 to 20°C

$C_7H_{12}O_2$ [Cyclohexane carboxylic acid]

Lange and Miederer (1957a) - L 15 to 25°C

Polyacrylic acid

Cartier and Daoust (1971) - L 25°C

Polymethacrylic acid

Daoust and Lajoie (1976) - L 25°C
Daoust and Lajoie (1975) - L 25°C

3. Carboxylate Salts

$NH_4C_2H_3O_2$ [Ammonium acetate]

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C
Leduc and Desnoyers (1973) - C 25°C
Dunnington and Hoggard (1899) - L room temperature
Leduc, Fortier and Desnoyers (1974) - L 25°C
Thomsen (1883a) - L 18°C

$NH_4C_4H_5O_6$ [Ammonium tartrate]

Thomsen (1883b) - L 18°C

$Pb(C_2H_3O_2)_2$ [Lead acetate]

Marignac (1878) - C 18 to 51°C
Berthelot (1873c) - L temperature not given

$Zn(C_2H_3O_2)_2$ [Zinc acetate]

Marignac (1878) - C 19 to 51°C
Berthelot (1873c) - L temperature not given
Thomsen (1883b) - L 18°C

$Zn(C_3H_5O_3)_2$ [Zinc lactate]

Meyerhof (1922) - L 20°C

$Cu(C_2H_3O_2)_2$ [Copper acetate]

Berthelot (1873c) - L temperature not given

$Ni(C_2H_3O_2)_2$ [Nickel acetate]

Marignac (1878) - C 25 to 56°C

$Fe(C_2H_3O_2)_2$ [Iron acetate]

Berthelot (1873c) - L temperature not given

$Mn(C_2H_3O_2)_2$ [Maganese acetate]

Marignac (1878) - C 19 to 52°C

$Mg(C_2H_3O_2)_2$ [Magnesium acetate]

Marignac (1878) - C 21 to 52°C

$Ca(C_2H_3O_2)_2$ [Calcium acetate]

Marignac (1878) - C 22 to 52°C
Plake (1932) - L 0 to 20°C

$Sr(C_2H_3O_2)_2$ [Strontium acetate]

Marignac (1878) - C 20 to 52°C

$Ba(CHO_2)_2$ [Barium formate]

Berthelot (1875ℓ) - L 10°C

$Ba(C_2H_3O_2)_2$ [Barium acetate]

Marignac (1878) - C 19 to 52°C
Berthelot (1875ℓ) - L 10°C

$NaCHO_2$ [Sodium formate]

Ackermann and Schreiner (1958) - C 0 to 130°C
Berthelot (1875ℓ) - L 10°C

$NaC_2H_3O_2$ [Sodium acetate]

Ackermann and Schreiner (1958) - C 0 to 130°C
Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C
Drucker (1934) - C 18°C
Grenthe, Hessler and Ots (1973) - C 25°C
Kapustinsky and Stakhanova (1958) - C 0 to 25°C
Leduc and Desnoyers (1973) - C 25°C
Marignac (1878) - C 20 to 52°C
Perreu (1940a) - C 18°C
Pickering (1887) - C 0 to 25°C
Richards and Gucker (1925) - C 0 to 25°C
Thomsen (1883a) - C 18°C
Berthelot (1875h) - L 10°C
Berthelot (1875ℓ) - L 10°C
Fricke (1929) - L 20°C
Lindenbaum (1971b) - L 25°C
Perreu (1940) - L 18°C
Richards and Gucker (1929) - L 20°C
Savchenko, Akhumov and Zhilina (1970) - L 18 to 25°C
Thomsen (1883b) - L 18°C

$NaC_2H_3O_3$ [Sodium Glycolate]

DeForcrand (1884a) - L 20°C

$NaC_3H_5O_2$ [Sodium propionate]

Ackermann and Schreiner (1958) - C 0 to 130°C

$NaC_4H_7O_2$ [Sodium butyrate]

Berthelot (1875h) - L 10°C
Berthelot (1875ℓ) - L 10°C
Lindenbaum (1971a) - L 25°C
Lindenbaum (1971b) - L 25°C
Petersen (1893) - L 21°C

$NaC_4H_5O_6$ [Sodium hydrogen tartrate]

Richards and Gucker (1925) - C 16 to 20°C

$Na_2C_4H_4O_6$ [Sodium tartrate]

Richards and Gucker (1925) - C 16 to 20°C

$NaC_5H_9O_2$ [Sodium valerate]

Berthelot (1875ℓ) - L 10°C
Lindenbaum (1971a) - L 25°C
Lindenbaum (1971b) - L 25°C

$NaC_6H_7O_7H_2$ [Sodium dihydrogen citrate]

Richards and Gucker (1925) - C 16 to 20°C

$NaC_6H_5O_7H_2$ [Sodium dihydrogen citrate]

Richards and Mair (1929) - L 16 to 20°C

$Na_2HC_5H_5O_7$ [Disodium hydrogen citrate]

Richards and Gucker (1925) - L 16 to 20°C

$Na_2C_6H_5O_7H$ [Disodium hydrogen citrate]

Richards and Mair (1929) - L 16 to 20°C

$Na_3C_6H_5O_7$ [Sodium citrate]

Richards and Gucker (1925) - C 16 to 20°C

Richards and Mair (1929) - L 16 to 20°C

$NaC_7H_{13}O_2$ [Sodium heptanoate]

Lindenbaum (1971a) - L 25°C

$NaC_8H_{15}O_2$ [Sodium octanoate]

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Leduc and Desnoyers (1973) - C 25°C

$NaC_9H_{17}O_2$ [sodium nonanoate]

Lindenbaum (1971a) - L 25°C

$NaC_7H_5O_2$ [Sodium benzoate]

Desnoyers, Pagé, Perron, Fortier, Leduc and Platford (1973) - C 25°C

$NaC_7H_6O_3$ [Sodium o-hydroxybenzoate]

Desnoyers, Pagé, Perron, Fortier, Leduc and Platford (1973) - C 25°C

$NaC_7H_6O_3$ [Sodium m-hydroxybenzoate]

Desnoyers, Pagé, Perron, Fortier, Leduc and Platford (1973) - C 25°C

$NaC_7H_6O_3$ [Sodium p-hydroxybenzoate]

Desnoyers, Pagé, Perron, Fortier, Leduc and Platford (1973) - C 25°C

Sodium Carboxymethylcellulose

Mita and Okubo (1974) - L 25°C

Sodium polyacrylate

Cartier and Daoust (1971) - L 25°C

Ise, Mita and Okubo (1973) - L 25°C

Mita and Okubo (1974) - L 25°C

Sodium polymethacrylate

Daoust and Lajoie (1976) - L 25°C

Daoust and Lajoie (1975) - L 25°C

KC_2O_4 [Potassium oxalate]

Doerinckel (1910) - C temperature not given

Perreu (1940b) - C 18°C

Doerinckel (1910) - L temperature not given

Perreu (1940b) - L 18°C

$KC_2H_3O_2$ [Potassium acetate]

Drucker (1934) - C 18°C

Marignac (1878) - C 20 to 51°C

Urban (1932) - C 10 to 40°C

Thomsen (1883b) - L 18°C

$KC_8H_{15}O_2$ [Potassium octanoate]

Goddard, Hoeve and Benson (1957) - L 25°C

$K_2(C_4H_4O_6)$ [Potassium tartrate]

Urban (1932) - C 10 to 40°C

Rubidium polymethacrylate

Daoust and Lajoie (1976) - L 25°C

Daoust and Lajoie (1975) - L 25°C

4. Ammonium Salts

A. RNH_3X

CH_3NH_3Cl [Methylammonium chloride]

Rüterjans, Schreiner, Sage and Ackermann (1969) - C 30 to 130°C

Tamaki, Yoshikawa and Kushida (1975) - C 10 to 45°C

Doehlemann and Lange (1934) - L 25°C

Kratz and Lange (1933) - L 15°C

Streeck (1934) - L 25°C

Whitlow and Felsing (1944) - L 25°C

CH_3NH_3Br [Methylammonium bromide]

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Leduc, Fortier and Desnoyers (1974) - C 25°C

Leduc, Fortier and Desnoyers (1974) - L 25°C

$C_2H_5NH_3Cl$ [Ethylammonium chloride]

Rüterjans, Schreiner, Sage and Ackermann (1969) - C 30 to 130°C

Tamaki, Yoshikawa and Kushida (1975) - C 10 to 45°C

$C_2H_5NH_3Br$ [Ethylammonium bromide]

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Leduc, Fortier and Desnoyers (1974) - C 25°C

Leduc, Fortier and Desnoyers (1974) - L 25°C

c-$C_3H_5NH_3Br$ [Cyclopropylammonium bromide]

Jolicoeur, Boileau, Bazinet and Picker (1975) - C 25°C

$C_3H_7NH_3Cl$ [Propylammonium chloride]

Tamaki, Yoshikawa and Kushida (1975) - C 10 to 45°C

$C_3H_7NH_3Br$ [Propylammonium bromide]

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Leduc, Fortier and Desnoyers (1974) - C 25°C

Leduc, Fortier and Desnoyers (1974) - L 25°C

$C_4H_9NH_3Cl$ [Butylammonium chloride]

Tamaki, Yoshikawa and Kushida (1975) - C 10 to 40°C

$C_4H_9NH_3Br$ [Butylammonium bromide]

Bonner and Cerutti (1976) - C 25°C

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Leduc, Fortier and Desnoyers (1974) - C 25°C

Rüterjans, Schreiner, Sage and Ackermann (1969) - C 30 to 130°C

Leduc, Fortier and Desnoyers (1974) - L 25°C

c-$C_5H_9NH_3Br$ [Cyclopentylammonium bromide]

Jolicoeur, Boileau, Bazinet and Picker (1975) - C 25°C

$C_5H_{11}NH_3Cl$ [Pentylammonium chloride]

Tamaki, Yoshikawa and Kushida (1975) - C 10 to 40°C

$C_5H_{11}NH_3Br$ [Pentylammonium bromide]

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Leduc, Fortier and Desnoyers (1974) - C 25°C

Leduc, Fortier and Desnoyers (1974) - L 25°C

c-$C_6H_{11}NH_3Br$ [Cyclohexylammonium bromide]

Jolicoeur, Boileau, Bazinet and Picker (1975) - C 25°C

$C_6H_{13}NH_3Cl$ [Hexylammonium chloride]

Tamaki, Yoshikawa and Kushida (1975) - C 10 to 40°C

$C_6H_{13}NH_3Br$ [Hexylammonium bromide]

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Leduc, Fortier and Desnoyers (1974) - C 25°C

Leduc, Fortier and Desnoyers (1974) - L 25°C

c-$C_7H_{11}NH_3Br$ [Cycloheptylammonium bromide]

Jolicoeur, Boileau, Bazinet and Picker (1975) - C 25°C

$C_7H_{15}NH_3Br$ [Heptylammonium bromide]

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Leduc, Fortier and Desnoyers (1974) - C 25°C

Leduc, Fortier and Desnoyers (1974) - L 25°C

$C_8H_{17}NH_3Br$ [Octylammonium bromide]

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Leduc, Fortier and Desnoyers (1974) - C 25°C

Leduc, Fortier and Desnoyers (1974) - L 25°C

c-$C_{12}H_{23}NH_3Br$ [Cyclododecylammonium bromide]

Jolicoeur, Boileau, Bazinet and Picker (1975) - C 25°C

$C_{12}H_{25}NH_3Br$ [Dodecylammonium bromide]

Jolicoeur, Boileau, Bazinet and Picker (1975) - - C 25°C

B. R_2NH_2X

$(CH_3)_2NH$ [Dimethylamine]

Patterson and Felsing (1938) - H 25°C

$(CH_3)_2NH_2Cl$ [Dimethylammonium chloride]

Tamaki, Yoshikawa and Kushida (1975) - C 10 to 35°C

Doehlemann and Lange (1934) - L 25°C

Kratz and Lange (1933) - L 15°C

Streeck (1934) - L 25°C

Whitlow and Felsing (1944) - L 25°C

$(C_2H_5)_2NH_2Cl$ [Diethylammonium chloride]

Tamaki, Yoshikawa and Kushida (1975) - C 15 to 35°C

$(C_3H_7)_2NH_2Cl$ [Dipropylammonium chloride]

Tamaki, Yoshikawa and Kushida (1975) - C 10 to 35°C

$(C_4H_9)_2NH_2Cl$ [Dibutylammonium chloride]

Tamaki, Yoshikawa and Kushida (1975) - C 10 to 35°C

C. R_3NHX

$(CH_3)_3N$ [Trimethyamine]

Patterson and Felsing (1938) - H 25°C

$(CH_3)_3NHCl$ [Trimethylammonium chloride]

Tamaki, Yoshikawa and Kushida (1975) - C 10 to 30°C

Doehlemann and Lange (1934) - L 25°C

$(CH_3)_3NHCl$ [Trimethylammonium chloride] (Cont.)

Streeck (1934) - L 25°C

Whitlow and Felsing (1944) - L 25°C

$(C_2H_5)_3NHCl$ (Triethylammonium chloride]

Tamaki, Yoshikawa and Kushida (1975) - C 10 to 35°C

$(C_3H_7)_3NHCl$ [Tripropylammonium chloride]

Tamaki, Yoshikawa and Kushida (1975) - C 10 to 35°C

$(C_4H_9)_3NHBr$ [Tributylammonium bromide]

Jolicoeur and Boileau (1974) - C 25°C

$(C_5H_{11})_3NHCl$ [Tripentylammonium chloride]

Jolicoeur and Boileau (1974) - C 25°C

D. R_4NX

$(CH_3)_4NF$ [Tetramethylammonium fluoride]

Wood, Anderson, Beck, France, DeVry and Soltzberg (1967) - L 25°C

$(CH_3)_4NCl$ [Tetramethylammonium chloride]

Perron, Desrosiers and Desnoyers (1976) - C 25°C

Doehlemann and Lange (1934) - L 25°C

Kratz and Lange (1933) - L 15°C

Lindenbaum (1966) - L 25°C

Streeck (1934) - L 25°C

$(CH_3)_4NBr$ [Tetramethylammonium bromide]

Bonner and Cerutti (1976) - C 25°C

Mastroianni and Criss (1972b) - C 10 to 90°C

Perron, Desrosiers and Desnoyers (1976) - C 25°C

Philip and Desnoyers (1972) - C 25°C (D_2O)

Sarma, Mohanty and Ahluwalia (1969) - C 25 to 35°C

Arnett and Campion (1970) - H 13 to 48°C

Cassel and Wen (1972) - H 25°C

DeVisser and Somsen (1973) - H 5 to 50°C

Fortier, Leduc, Picker and Desnoyers (1973) - L 25°C

Levine and Wood (1973) - L 25°C (D_2O)

Lindenbaum (1966) - L 25°C

$(CH_3)_4NI$ [Tetramethylammonium iodide]

Perron, Desrosiers and Desnoyers (1976) - C 25°C

Sarma, Mohanty and Ahluwalia (1969) - C 25 to 35°C

Lindenbaum (1966) - L 25°C

Tetramethylammonium polyacrylate

Ise, Mita and Okubo (1973) - L 25°C

$(C_2H_5)_4NF$ [Tetraethylammonium fluoride]

Wood, Anderson, Beck, France, DeVry and Soltzberg (1967) - L 25°C

$(C_2H_5)_4NCl$ [Tetraethylammonium chloride]

Perron, Desrosiers and Desnoyers (1976) - C 25°C

Lindenbaum (1966) - L 25°C

$(C_2H_5)_4NBr$ [Tetraethylammonium bromide]

Bonner and Cerutti (1976) - C 25°C

Perron, Desrosiers and Desnoyers (1976) - C 25°C

Philip and Desnoyers (1972) - C 25°C (D_2O)

Sarma, Mohanty and Ahluwalia (1969) - C 25 to 35°C

Shin and Criss (1976) - C 5 to 85°C

Arnett and Campion (1970) - H 10 to 500°C

Cassel and Wen (1972) - H 25°C

Birch and Hall (1972) - L 25°C

Levine and Wood (1973) - L 25°C (D_2O)

Lindenbaum (1966) - L 25°C

$(C_2H_6O)_4NBr$ [Tetraethanolammonium bromide]

Wood and Belkin (1973) - L 25°C

$(C_2H_5)_4NI$ [Tetraethylammonium iodide]

Perron, Desrosiers and Desnoyers (1976) - C 25°C

Sarma, Mohnaty and Ahluwalia (1969) - C 25 to 35°C

Lindenbaum (1966) - L 25°C

Tetraethylammonium polyacrylate

Ise, Mita and Okuba (1973) - L 25°C

$(C_3H_7)_4NF$ [Tetrapropylammonium fluoride]

Wood, Anderson, Beck, France DeBry and Soltzberg (1967) - L 25°C

$(C_3H_7)_4NCl$ [Tetrapropylammonium chloride]

Perron, Desrosiers and Desnoyers (1976) - C 25°C

Ensor, Anderson and Conally (1974) - L 40 to 80°C

Lindenbaum (1966) - L 25°C

$(C_3H_7)_4NBr$ [Tetrapropylammonium bromide]

Perron, Desrosiers and Desnoyers (1976) - C 25°C

Philip and Desnoyers (1972) - C 25°C (D_2O)

Sarma, Mohanty and Ahluwalia (1969) - C 25 to 35°C

Shin, Worley and Criss (1976) - C 5 to 85°C

Arnett and Campion (1970) - H 13 to 46°C

Levine and Wood (1973) - L 25°C (D_2O)

Lindenbaum (1966) - L 25°C

$(C_3H_7)_4NI$ [Tetrapropylammonium iodide]

Perron, Desrosiers and Desnoyers (1976) - C 25°C

Sarma, Mohanty and Ahluwalia (1969) - C 25 to 35°C

Lindenbaum (1966) - L 25°C

Tetrapropylammonium polyacrylate

Ise, Mita and Okubo (1973) - L 25°C

$(C_4H_9)_4NF$ [Tetrabutylammonium fluoride]

Lindenbaum (1971b) - L 25°C

$(C_4H_9)_4NCl$ [Tetrabutylammonium chloride]

Perron, Desrosiers and Desnoyers (1976) - C 25°C

Lindenbaum (1966) - L 25°C

$(C_4H_9)_4NBr$ [Tetrabutylammonium bromide]

Heuvelsland and Somsen (1976) - C 5 to 50°C

Jolicoeur, Philip, Perron, Leduc and Desnoyers (1972) - C 25°C

Mastroianni and Criss (1972b) - C 10 to 90°C

Mohanty, Sarma, Subramanian and Ahluwalia (1971) - C 15 to 35°C

Philip and Desnoyers (1972) - C 25°C (D_2O)

Sarma and Ahluwalia (1971) - C 45 to 75°C

Sarma, Mohanty and Ahluwalia (1969) - C 25 to 35°C

Shin and Criss (1976) - C 5 to 85°C

Arnett and Campion (1970) - H 5 to 60°C

Cassel and Wen (1972) - H 25°C

DeVisser and Somsen (1973) - H 5 to 50°C

Mohanty, Sarma, Subramanian and Ahluwalia (1971) - H 15 to 35°C

Fortier, Leduc, Picker and Desnoyers (1973) - L 25°C

Levine and Wood (1973) - L 25°C (D_2O)

Lindenbaum (1966) - L 25°C

Mayrath and Wood (1978) - L 125°C

$(C_4N_9)_4NI$ [Tetrabutylammonium iodide]

Perron, Desrosiers and Desnoyers (1976) - C 25°C

$(C_4H_9)_4N(C_4H_7O_2)$ [Tetrabutylammonium butyrate]

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Leduc and Desnoyers (1973) - C 25°C

Levine and Lindenbaum (1973) - C 15 to 45°C

Levine and Lindenbaum (1973) - L 15 to 45°C

Lindenbaum (1971b) - L 25°C

$(C_4H_9)_4N(C_5H_9O_2)$ [Tetrabutylammonium valerate]

Lindenbaum (1971b) - L 25°C

$(C_4H_9)_4N(C_7H_{13}O_2)$ [Tetrabutylammonium heptylate]

Lindenbaum (1971b) - L 25°C

$(C_4H_9)_4N(C_8H_{15}O_2)$ [Tetrabutylammonium octanoate]

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Leduc and Desnoyers (1973) - C 25°C

$(C_4H_9)_4N(C_9H_{17}O_2)$ [Tetrabutylammonium pelargonate]

Lindenbaum (1971b) - L 25°C

$(C_4H_9)_4N(C_{10}H_{19}O_2)$ [Tetrabutylammonium caprate]

Lindenbaum (1971b) - L 25°C

Tetrabutylammonium polyacrylate

Ise, Mita and Okubo (1973) - L 25°C

$(C_5H_{11})_4NCl$ [Tetrapentylammonium chloride]

Perron, Desrosiers and Desnoyers (1976) - C 25°C

$(n\text{-}C_5H_{11})_4NBr$ [Tetrapentylammonium bromide]

Mohanty and Ahluwalia (1972) - C 30°C

Mohanty, Sunder and Ahluwalia (1972) - C 5 to 85°C

Sturtevant (1975) - C 10 to 80°C

$(C_5H_{11})_4NI$ [Tetrapentylammonium iodide]

Perron, Desrosiers and Desnoyers (1976) - C 25°C

E. $R'R_3NX$

$(C_2H_4OH)(CH_3)_3NCl$ [Hydroxyethyltrimethylammonium chloride]

Boyd, Chase and Vaslow (1967) - L 25°C

$(C_2H_4OH)(CH_3)_3NBr$ [Hydroxyethyltrimethylammonium bromide]

Boyd, Chase and Vaslow (1967) - L 25°C

$(C_6H_{13}\ CH_3)_3NBr$ [Hexyltrimethylammonium bromide]

Birch and Hall (1972) - L 25°C

$(C_7H_7)(CH_3)_3NCl$ [Benzyltrimethylammonium chloride]

Boyd, Chase and Vaslow (1967) - L 25°C

$(C_7H_7)(CH_3)_3NBr$ [Benzyltrimethylammonium bromide]

Boyd, Chase and Vaslow (1967) - L 25°C

$(C_8H_{16})(CH_3)_3NBr$ [Octyltrimethylammonium bromide]

Birch and Hall (1972) - L 25°C

$(C_9H_{19})(CH_3)_3NBr$ [Nonyltrimethylammonium bromide]

Musbally, Perron and Desnoyers (1976) - C 5 to 50°C

$(C_{10}H_{21})(CH_3)_3NBr$ [Decyltrimethylammonium bromide]

Birch and Hall (1972) - L 25°C

$(C_{12}H_{25})(CH_3)_3NBr$ [Dodecyltrimethylammonium bromide]

Birch and Hall (1972) - L 25°C

Espada, Jones and Pilcher (1970) - L 23 to 30°C

Jones and Piercy (1973) - L 23°C

Jones, Pilcher and Espada (1970) - L 23 to 30°C

F. $R'R''R_2NX$

$(HOC_2H_4)(C_6H_5CH_2)(CH_3)_2NF$ [Benzylhydroxyethyldimethylammonium fluoride]

Boyd, Chase and Vaslow (1967) - L 25°C

$(HOC_2H_4)(C_6H_5CH_2)(CH_3)_2NBr$ [Benzylhydroxyethyldimethylammonium bromide]

Boyd, Chase and Vaslow (1967) - L 25°C

$(HOC_2H_4)(C_6H_5CH_2)(CH_3)_2NI$ [Benzylhydroxyethyldimethylammonium iodide]

Boyd, Chase and Vaslow (1967) - L 25°C

5. Azoniaspiroalkanes

$(CH)_4N(CH_2)_4Br$ [5-azoniaspiro [4.4] nonane bromide]

Wen, LoSurdo, Joliceur and Boileau (1976) - C 25°C

Wilson and Wen (1975) - H 25°C

LoSurdo, Wen, Jolicoeur and Fortier (1977) - L 25°C

$(CH_2)_5N(CH_2)_5Cl$ [6-azoniaspiro [5.5]-undicane chloride]

Wilson and Wen (1975) - H 25°C

LoSurdo, Wen, Jolicoeur and Fortier (1977) - L 25°C

$(CH_2)_5N(CH_2)_5Br$ [6-azoniaspiro [5.5]-undicane bromide]

Wen, LoSurdo, Jolicoeur and Boileau (1976) - C 25°C

Wilson and Wen (1975) - H 25°C

LoSurdo, Wen, Jolicoeur and Fortier (1977) - L 25°C

$(CH_2)_5N(CH_2)_5I$ [6-azoniaspiro [5.5]-undicane iodide]

Wilson and Wen (1975) - H 25°C

LoSurdo, Wen, Jolicoeur and Fortier (1977) - L 25°C

$(CH_2)_6N(CH_2)_6Cl$ [7-azoniaspiro [6.6]-tridicane chloride

LoSurdo, Wen, Jolicoeur and Fortier (1977) - L 25°C

$(CH_2)_6N(CH_2)_6Br$ [7-azoniaspiro [6.6]-tridicane bromide]

Wen, LoSurdo, Jolicoeur and Boileau (1976) - C 25°C

Wilson and Wen (1975) - H 25°C

LoSurdo, Wen, Jolicoeur and Fortier (1977) - L 25°C

$(CH_2)_6N(CH_2)_6I$ [7-azoniaspiro [6.6]-tridicane iodide]

LoSurdo, Wen, Holicouer and Fortier (1977) - L 25°C

6. Bolaforms

Propane-1-3-bis(trimethylammonium) dichloride

Agharkar and Lindenbaum (1975) - L 25°C

Propane-1,3-bis(trimethylammonium) dibromide

Agharkar and Lindenbaum (1975) - L 25°C

Propane-1,3-bis(trimethylammonium) diacetate

Agharkar and Lindenbaum (1975) - L 25°C

Propane-1,3-bis(trimethylammonium) dibutyrate

Agharkar and Lindenbaum (1975) - L 25°C

Butane-1,4-bis(trimethylammonium) dichloride

Agharkar and Lindenbaum (1975) - L 25°C

Butane-1,4-bis(trimethylammonium) dibromide

Agharkar and Lindenbaum (1975) - L 25°C

Butane-1,4-bis(trimethylammonium) diacetate

Agharkar and Lindenbaum (1975) - L 25°C

Butane-1,4-bis(trimethylammonium) dibutyrate

Agharkar and Lindenbaum (1975) - L 25°C

Butane-1,4-bis(triethylammonium) dibromide

Burns and Verrall (1973) - C 18 to 33°C (D_2O)
Verrall and Dickson (1976) - C 18 to 33°C

Pentane-1,5-bis(trimethylammonium) dichloride

Agharkar and Lindenbaum (1975) - L 25°C

Pentane-1,5-bis(trimethylammonium) dibromide

Agharkar and Lindenbaum (1975) - L 25°C

Pentane-1,5-bis(trimethylammonium) diacetate

Agharkar and Lindenbaum (1975) - L 25°C

Pentane-1,5-bis(trimethylammonium) dibutyrate

Agharkar and Lindenbaum (1975) - L 25°C

Hexane-1,6-bis(trimethylammonium) dichloride

Agharkar and Lindenbaum (1975) - L 25°C

Hexane-1,6-bis(trimethylammonium) dibromide

Agharkar and Lindenbaum (1975) - L 25°C

Hexane-1,6-bis(trimethylammonium) diacetate

Agharkar and Lindenbaum (1975) - L 25°C

Hexane-1,6-bis(trimethylammonium) dibutyrate

Agharkar and Lindenbaum (1975) - L 25°C

Hexane-1,6-bis(triethylammonium) dibromide

Burns and Verrall (1973) - C 18 to 33°C (D_2O)

Heptane-1,7-bis(trimethylammonium) dichloride

Agharkar and Lindenbaum (1975) - L 25°C

Heptane-1,7-bis(trimethylammonium) dibromide

Agharkar and Lindenbaum (1975) - L 25°C

Heptane-1,7-bis(trimethylammonium) diacetate

Agharkar and Lindenbaum (1975) - L 25°C

Heptane-1,7-bis(trimethylammonium) dibutyrate

Agharkar and Lindenbaum (1975) - L 25°C

Octane-1,8-bis(trimethylammonium) dichloride

Agharkar and Lindenbaum (1975) - L 25°C

Octane-1,8-bis(trimethylammonium) dibromide

Agharkar and Lindenbaum (1975) - L 25°C

Octane-1,8-bis(trimethylammonium) diacetate

Agharkar and Lindenbaum (1975) - L 25°C

Octane-1,8-bis(trimethylammonium) dibutyrate

Agharkar and Lindenbaum (1975) - L 25°C

Octane-1,8-bis(tri-n-butylammonium) difluoride

Lindenbaum (1969) - L 25°C

Octane-1,8-bis(tri-n-butylammonium) dichloride

Lindenbaum (1969) - L 25°C

Octane-1,8-bis(tri-n-butylammonium) dibromide

Lindenbaum (1969) - L 25°C

Nonane-1,9-bis(trimethylammonium) dichloride

Agharkar and Lindenbaum (1975) - L 25°C

Nonane-1,9-bis(trimethylammonium) dibromide

Agharkar and Lindenbaum (1975) - L 25°C

Nonane-1,9-bis(trimethylammonium) diacetate

Agharkar and Lindenbaum (1975) - L 25°C

Nonane-1,9-bis(trimethylammonium) dibutyrate

Agharkar and Lindenbaum (1975) - L 25°C

Decane-1,10-bis(trimethylammonium) dichloride

Agharkar and Lindenbaum (1975) - L 25°C

Decane-1,10-bis(trimethylammonium) dibromide

Agharkar and Lindenbaum (1975) - L 25°C

Decane-1,10-bis(trimethylammonium) diacetate

Agharkar and Lindenbaum (1975) - L 25°C

Decane-1,10-bis(trimethylammonium) dibutyrate

Agharkar and Lindenbaum (1975) - L 25°C

Decane-1,10-bis(triethylammonium) dibromide

Burns and Verral (1973) - C 18 to 33°C (D_2O).
Verral and Dickson (1976) - C 18 to 33°C

1,10-diazobicyclo[8.8.8]hexacosane dibromide

Jolicoeur and Boileau (1974) - C 25°C

1,12 diazobicyclo[10.10.10]eicosane dichloride

Jolicoeur and Boileau (1974) - C 25°C

7. Surfactants (organic sulfates and sulfonates)

$C_6H_{10}SO_3$ [p-Ethylbenzenesulfonic acid]

Boyd, Baslow, Schwarz and Chase (1967) - L 25°C

Alkyl trimethylammonium alkyl sulfates $[CH_2)_x(CH_3)_3\overset{+}{N}(CH_2)_y]_2SO_4$

Corkill, Goodman, Harrold and Tate (1966) - H 25°C

Polystyrenesulfonic acid

Dolar and Skerjanc (1974) - L 25°C
Skerjanc, Dolar and Leskovsek (1967) - L 25°C

Zinc-polystyrenesulfonate

Skerjanc, Dolar and Leskovsek (1967b) - L 25°C

$C_6H_9SO_3Li$ [Lithium-p-Ethylbenzenesulfonate]

Boyd, Vaslow, Schwarz and Chase (1967) - L 25°C

Lithium-polystyrenesulfonates

Skerjanc, Dolar and Leskovsek (1970) - L 25°C

CH_3SO_4Na [Sodium methyl sulfate]

Tamaki, Isomura and Ohara (1972) - C 10 to 45°C
Birch and Hall (1972) - L 25°C

$C_2H_5SO_4Na$ [Sodium ethyl sulfate]

Tamaki, Isomura and Ohara (1972) - C 10 to 45°C

$C_3H_7SO_4Na$ [Sodium propyl sulfate]

Tamaki, Isomura and Ohara (1972) - C 10 to 45°C

$C_4H_9SO_4Na$ [Sodium butyl sulfate]

Tamaki, Isomura and Ohara (1972) - C 10 to 45°C

$C_5H_{11}SO_4Na$ [Sodium pentyl sulfate]

Tamaki, Isomura and Ohara (1972) - C 10 to 45°C

$C_6H_{13}SO_4Na$ [Sodium hexyl sulfate]

Tamaki, Isomura and Ohara (1972) - C 10 to 45°C
Birch and Hall (1972) - L 25°C

$C_8H_{17}SO_4Na$ [Sodium octyl sulfate]

Hutchinson, Manchester and Winslow (1954) - H 25°C
Birch and Hall (1972) - L 25°C
Goddard, Hoeve and Benson (1957) - L 25°C

$C_{10}H_{21}SO_4Na$ [Sodium decyl sulfate]

Hutchinson, Manchester and Winslow (1954) - H 25°C
Birch and Hall (1972) - L 25°C
Goddard, Hoeve and Benson (1957) - L 25°C
Hutchinson and Winslow (1956) - L 25°C

$C_{12}H_{25}SO_4Na$ [Sodium dodecyl sulfate]

Goddard and Brown (1956) - H 25°C
Berg (1977) - L 25°C
Birch and Hall (1972) - L 25°C
Pilcher, Jones, Espada and Skinner (1969) - L 25°C

$C_6H_9SO_3Na$ [Sodium p-ethylbenzenesulfonate]

Boyd, Vaslow, Schwarz and Chase (1967) - L 25°C

Sodium-polystyrenesulfonic acid

Boyd and Wilson (1976) - L 25°C
Mita, Okubo and Ise (1976) - L 25°C
Skerjanc, Dolar and Leskovsek (1967) - L 25°C

$C_6H_9SO_3K$ [Potassium p-ethylbenzenesulfonate]

Boyd, Vaslow, Schwarz and Chase (1967) - L 25°C

Potassium-polystyrenesulfonates

Skerjanc, Dolar and Leskovsek (1970) - L 25°C

$C_6H_9SO_3Cs$ [Cesium p-ethylbenzenesulfonate]

Boyd, Vaslow, Schwarz and Chase (1967) - L 25°C

Cesium-polystyrenesulfonate

Skerjanc, Dolar and Leskovsek (1970) - L 25°C

8. Micellaneous

Seawater

Bromley, Desaussure, Clipp and Wright (1967) - C 2 to 80°C

Bromley, Diamond, Salami and Wilkins (1970) - C 80 to 200°C

Cox and Smith (1959) - C 0 to 30°C

Duer, Leung, Oglesby and Millero (1976) - C 25°C

Faletti, Herrick and Adams (1969) - C 5 to 85°C

Mashovets, Matveeva, Puchkov and Fedorov (1973) - C 25 to 350°C

Duer, Leung, Oglesby and Millero (1976) - L 25°C

Lindsay and Liu (1968) - V 106 to 200°C

Mashovets, Matveeva, Puchkov and Fedorov (1973) - V 25 to 340°C

CH_4N_2O [Urea]

Bennewitz and Kratz (1936) - C 20°C

Desrosiers, Perron, Mathieson, Conway and Desnoyers (1974) - C 25°C

Philip, Perron and Desnoyers (1974) - C 25°C (D_2O)

White (1936) - C 25°C

Logwinienko, Taniewska-Osinska and Pluta (1972) - H 5 to 25°C

Hamilton and Stokes (1972) - L 5 to 45°C

Perman and Lovett (1926) - L 40 to 80°C

Perman and Lovett (1926) - V 40 to 80°C

CH_4N_2S [Thiourea]

Lange and Miederer (1957a) - L 15 to 25°C

n-Dodecylpyridinium iodide

Jones, Agg and Pilcher (1971) - L 25 to 40°C

1,1´-Dimethyl-4,4´-Dipyridinium Dichloride

Perron and Desnoyers (1972) - C 25°C

Perron and Desnoyers (1972) - L 25°C

Polyvinyl-n-butylpyridinium bromide

Schulze (1954) - L 25°C

N-Butylpyridinium bromide

Schulze (1954) - L 25°C

C_6H_6ONa [Sodium phenol]

Hopkins, Duer and Millero (1976) - C 25°C

C_7H_5NONa [Sodium-m-Cyanophenol]

Hopkins, Duer and Millero (1976) - C 25°C

C_7H_5NONa [Sodium-p-Cyanophenol]

Hopkins, Duer and Millero (1976) - C 25°C

$C_6H_5NO_3Na$ [Sodium-m-Nitrophenol]

Hopkins, Duer and Millero (1976) - C 25°C

$C_6H_5NO_3Na$ [Sodium-p-Nitrophenol]

Hopkins, Duer and Millero (1976) - C 25°C

$(C_6H_5)_4PCl$ [Tetrahexylphosphonium chloride]

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Jolicoeur, Philip, Perron, Leduc and Desnoyers (1972) - C 25°C

Mohanty and Ahluwalia (1972) - C 30°C

Sunder, Chawla and Ahluwalia (1974) - C 25 to 30°C

$(C_6H_5)_4AsCl$ [Tetrahexylarsonium chloride]

Desnoyers, DeVisser, Perron and Picker (1976) - 25°C

Jolicoeur, Philip, Perron, Leduc and Desnoyers (1972) 25°C

Sunder, Chawla and Ahluwalia (1974) - 15 to 75°C

$(C_6H_5)_4PBr$ [Tetrahexyl phosphonium bromide]

Jolicoeur and Philip (1975) - C 10 to 45°C

$(C_6H_5)_4PBr$ [Tetrahexylphosphoniam bromide] (cont.)

Sunder, Chawla and Ahluwalia (1974) - C 15 to 75°C

$(C_4H_9)_4PBr$ [Tetrabutylphosphonium bromide]

Jolicoeur and Philip (1975) - C 10 to 45°C

Mohanty and Ahluwalia (1972) - C 30°C

Sunder, Chawla and Ahluwalia (1974) - C 5 to 75°C

$(C_6H_5)_4BNa$ [Sodium tetraphenyl boride]

Desnoyers, DeVisser, Perron and Picker (1976) - C 25°C

Jolicoeur, Philip, Perron, Leduc and Desnoyers (1972) - C 25°C

Jolicoeur and Philip (1975) - C 10 to 45°C

Mohanty, Sarma, Subramanian and Ahluwalia (1971) - C 15 to 35°C

Subramanian and Ahluwalia (1968) - C 0 to 90°C

Wu and Friedman (1966b) - H 25°C

Hexamethylenetetramine

Quadrifoglio, Crescenzi, Cesaro and Delben (1971) - L 25°C

Dimethyl-n-alkyl amine oxides $(CH_3)_2(CH_2)_nN^+\text{-}O^-$, $n = 8, 9, 10, 12$

Benjamin (1964) - H 25°C

Numerical Treatments and Reviews

Abel (1946)

Ahluwalia and Cobble (1964b)

Bahe (1972)

Bjerrum (1927)

Bonino and Vaglio (1928)

Bump and Sibbett (1955)

Cabani, Conti, Matteoli and Tani (1976)

Chapas (1933)

Criss and Cobble (1964)

Eigen and Wicke (1954)

Fortier and Desnoyers (1976)

Gatty (1934)

Ginzburg (1959)

Gucker (1949)

Gucker and Rubin (1935)

Holsboer (1902)

Kapustinsky, Drakin and Yakuskevskii (1953)

Lange (1959)

Lange and Meixner (1929a)

Lange and Meixner (1929b)

Lange and Monheim (1930c)

Lange and Robinson (1931)

Latysheva (1973)

Mikulin, Novoselov and Mishchenko (1970)

Novikov and Vasil'ev (1975)

Olofsson and Hepler (1975)

Parker (1965)

Pitzer (1937)

Pitzer, Peterson and Silvester (1978)

Pitzer and Silvester (1978)

Robinson and Frank (1934)

Silvester and Pitzer (1977)

Silvester and Pitzer (1978)

Stakhanova, Karapet'yants, Vasil'ev and Epikhin (1964)

Woolley and Hepler (1977)

Young and Groenier (1936)

Young and Seligmann (1938)

Zdanovski (1972)

Zwicky (1926)

Bibliography

Abel, E., J. Phys. Chem. 50, 260 (1946).

Abrosimov, V. K., Ionov, A. V., and Krestov, G. A., Radiokhimiya 19, 862 (1977).

Ackermann, Th., Discuss. Faraday Soc. 180 (1957).

Ackermann, Th., Z. Elektrochem. 62, 411 (1958).

Ackermann, Th., and Schreiner, F., Z. Elektrochem. 62, 1143 (1958).

Agde, G., and Holtmann, H., Z. Anorg. Allg. Chem. 158, 317 (1926).

Agharkar, S., and Lindenbaum, S., J. Phys. Chem. 79, 2068 (1975).

Ahluwalia, J. C., and Cobble, J. W., J. Am. Chem. Soc. 86, 5377 (1964 a).

Ahluwalia, J. C., and Cobble, J. W., J. Am. Chem. Soc. 86, 5381 (1964 b).

Ahluwalia, J. C., Millero, F. J., Goldberg, R. N., and Hepler, L. G., J. Phys. Chem. 70, 319 (1966).

Ahrland, S., and Kullberg, L., Acta. Chem. Scand. 25, 3471 (1971).

Akerlof, G., and Bender, P., J. Am. Chem. Soc. 70, 2366 (1948).

Akerlof, G., and Kegeles, G., J. Am. Chem. Soc. 62, 620 (1940).

Akerlof, G., and Teare, J. W., J. Am. Chem. Soc. 59, 1855 (1936).

Allmand, A. J., and Polack, W. G., J. Chem. Soc. 115, 1020 (1939).

Andauer, M., and Lange, E., Z. Phys. Chem. (Leipzig) A165, 89 (1933).

Anderson, D. W., Malcolm, G. N., and Parton, H. N., J. Phys. Chem. 64, 494 (1960).

Apelblat, A., Azoulay, D., and Sahar, A., J. Chem. Soc. Faraday Trans. I, 69, 1624 (1973).

Apelblat, A., and Sahar, A., J. Chem. Soc. Faraday Trans. I, 71, 1667 (1975).

Ardizonne, S., Longhi, P., Mussini, T., and Rondinini, S., J. Chem. Thermodyn. 8, 557 (1976).

Arnett, E. M., and Campion, J. J., J. Am. Chem. Soc. 92, 7097 (1970).

Augustynski, J. W., Faita, G., and Mussini, T., J. Chem. Eng. Data 12, 369 (1967).

Auméras, M., C. R. Hebd. Seances Acad. Sci. 192, 359 (1931).

Austin, J. M., and Mair, A. D., J. Phys. Chem. 66, 519 (1962).

Babakulov, N., and Latysheva, V. A., Russ. J. Phys. Chem. (Eng. Trans.) 48, 587 (1974); Zh. Fiz. Khim. 48, 1012 (1974).

Backlund, J., Oevers. Fin. Vetensk.-Soc. Foer. 54, 1 (1911).

Baehr, H., and Schomäcker, H., Forsch. Ingenieurwess. 41, 43 (1975).

Bahe, L. W., J. Phys. Chem. 76, 1608 (1972).

Bailey, A. R., and Larson, J. W., J. Phys. Chem. 75, 2368 (1971).

Baker, J. L., Ph.D. Thesis, Iowa State University (1971).

Barnes, W. H., and Maass, O., Can. J. Res. 2, 218 (1930).

Bates, R. G., J. Am. Chem. Soc. 60, 2983 (1938).

Bates, R. G., J. Am. Chem. Soc. 61, 308 (1939).

Bates, R. G., J. Am. Chem. Soc. 63, 399 (1941).

Bates, R. G., and Bower, V. E., J. Res. Nat. Bur. Stand. (U.S.) 53, 283 (1954).

Bates, R. G., and Vosburgh, W. C., J. Am. Chem. Soc. 59, 1583 (1937).

Baud, E., and Gay, L., Ann. Chim. Phys. [8] 17, 398 (1909).

Bechtold, M. F., and Newton, R. F., J. Am. Chem. Soc. 62, 1390 (1940).

Beck, W. H., Dobson, J. V., and Wynne-Jones, W. F. K., Trans. Faraday Soc. 56, 1172 (1960).

Beck, W. H., Singh, K. P., and Wynne-Jones, W. F. K., Trans. Faraday Soc. 55, 331 (1959).

Becker, G., and Roth, W. A., Z. Elektrochem. 40, 836 (1934).

Becker, G., and Roth, W. A., Z. Phys. Chem. (Leipzig) A174, 104 (1935).

Bender, P., and Kaiser, A. D., Jr., J. Am. Chem. Soc. 76, 3084 (1954).

Benesi, H. A., Mason, L. S., and Robinson, A. L., J. Am. Chem. Soc. 68, 1755 (1946).

Benjamin, L., Can. J. Chem. 41, 2210 (1963).

Benjamin, L., J. Phys. Chem. 68, 3575 (1964).

Bennewitz, K., and Kratz, L., Phys. Z. 37, 496 (1936).

Benson, G. C., and Benson, G. W., Rev. Sci. Instr. 26, 477 (1955).

Berenger-Calvet, Mme., J. Chim. Phys. Phys.-Chim. Biol. 24, 325 (1927).

Berg, R. L., U.S. Energy Research and Development Administration Rept. No. BERC/TPR-77/3, (1977).

Berg, R. L., and Vanderzee, C. E., J. Chem. Thermodyn. 7, 219 (1975).

Berg, R. L., and Vanderzee, C. E., J. Chem. Thermodyn. 10, 331 (1978).

Berg, R. L., and Vanderzee, C. E., J. Chem. Thermodyn. 10, 1049 (1978).

Bertetti, J. W., and McCabe, W. L., Ind. Eng. Chem. 28, 247 (1936 a).

Bertetti, J. W., and McCabe, W. L., Ind. Eng. Chem. 28, 375 (1936 b).

Berthelot, Ann. Chim. Phys. [4] 30, 145 (1873 c).

Berthelot, Ann. Chim. Phys. [4] 30, 433 (1873 a).

Berthelot, M., C. R. Hebd. Seances Acad. Sci. 78, 769 (1874).

Berthelot, M., Ann. Chim. Phys. [5] 4, 21 (1875 b).

Berthelot, M., Ann. Chim. Phys. [5] 4, 154 (1875 c).

Berthelot, M., Ann. Chim. Phys. [5] 4, 445 (1875 d).

Berthelot, M., Ann. Chim. Phys. [5] 4, 513 (1875 f).

Berthelot, M., Ann. Chim. Phys. [5] 4, 526 (1875 g).

Berthelot, M., Ann. Chim. Phys. [5] 6, 334 (1875 h).

Berthelot, M., C. R. Hebd. Seances Acad. Sci. 80, 700 (1875 ℓ).

Berthelot, M., Ann. Chim. Phys. [5] 13, 20 (1878).

Berthelot, M., C. R. Hebd. Seances Acad. Sci. 93, 291 (1881).

Berthelot, M., Ann. Chim. Phys. [5] 27, 222 (1882).

Bewley, D. K., Trans. Faraday Soc. 56, 1629 (1960).

Bichowsky, J. Am. Chem. Soc. 45, 2225 (1923).

Bidinosti, D. R., and Biermann, W. J., Can. J. Chem. 34, 1591 (1956).

Biermann, W. J., Can. J. Chem. 38, 57 (1960).

Biermann, W. J., and Weber, N., J. Am. Chem. Soc. 76, 4289 (1954).

Biermann, W. J., and Yamasaki, R. S., J. Am. Chem. Soc. 77, 241 (1955).

Bindel, K., Ann. Phys. (Leipzig) 40, 370 (1890).

Birch, B. J., and Hall, D. G., J. Chem. Soc. Faraday Trans. I 68, 2350 (1972).

Birnthaler, W., and Lange, E., Z. Elektrochem. 43, 643 (1937).

Birnthaler, W., and Lange, E., Z. Elektrochem. 44, 679 (1938).

Bishop, F. L., Phys. Rev. 26, 169 (1908).

Bjellerup, L., Sunner, S., and Wadsö, I., Acta Chem. Scand. 11, 1761 (1957).

Bjerrum, N., Trans. Faraday Soc. 23, 445 (1927).

Blaszkowska, H., Rocz. Chem. 4, 120 (1924).

Blümcke, A., Ann. Phys. (Leipzig) 23, 161 (1884).

Bode, F., Z. Angew. Chem. 2, 244 (1889).

Bolarev, D., and Kolarov, V. P., Kolloid Z. Z. Polym. 88, 288 (1939).

Bonino, G. B., and Vaglio, V., Nuovo Cimento 5, 115 (1928).

Bonner, O. D., and Cerutti, P. J., J. Chem. Thermodyn. 8, 105 (1976).

Booman, K., Elverum, G. W., and Mason, D. M., J. Phys. Chem. 59, 516 (1955).

Borodenko, V. I., and Galinker, I. S., Izv. Vyssh. Ucheb. Zaved. Khim. Khim. Tekhnol. 18, 591 (1975).

Borodenko, V. I., and Galinker, I. S., Izv. Vyssh. Ucheb. Zaved. Khim. Khim. Tekhnol. 19, 1908 (1976).

Böse, E., Phys. Z. 6, 550 (1905).

Bousfield, W. R., and Bousfield, C. E., Trans. Roy. Soc. (London) 218A, 119 (1919).

Boyd, G. E., Chase, J. W., and Vaslow, F., J. Phys. Chem. 71, 573 (1967).

Boyd, G. E., Vaslow, F., Schwarz, F., and Chase, J. W., J. Phys. Chem. 71, 3879 (1967).

Boyd, G. E., and Wilson, D. P., J. Phys. Chem. 80, 805 (1976).

Braunstein, H., and Braunstein, J., J. Chem. Thermodyn. 3, 419 (1971).

Brodale, G., and Giauque, W. F., J. Am. Chem. Soc. 80, 2042 (1958).

Broene, H. H., and DeVries, T., J. Am. Chem. Soc. 69, 1644 (1947).

Bromley, L. A., Desaussure, V. A., Clipp, J. C., and Wright, J. S., J. Chem. Eng. Data 12, 202 (1967).

Bromley, L. A., Diamond, A. E., Salami, E., and Wilkins, D. G., J. Chem. Eng. Data 15, 246 (1970).

Brönsted, J. N., Z. Phys. Chem. (Leipzig) 56, 645 (1906).

Brönsted, J. N., Z. Phys. Chem. (Leipzig) 68, 693 (1910).

Brönsted, J. N., Z. Phys. Chem. (Leipzig) 77, 315 (1911).

Büchner, A., Landolt-Börnstein Physikalisch-Chemische Tabellen Auf. 5, Erg 2 p. 1188 (1931).

Büchner, E. H., and Prins, A., Z. Physik. Chem. (Leipzig) 81, 113 (1912).

Bump, T. R., and Sibbitt, W. L., Ind. Eng. Chem. 47, 1665 (1955).

Burns, J. A., and Verrall, R. E., J. Solution Chem. 2, 489 (1973).

Burt, B. C., J. Chem. Soc. 85, 1339 (1904).

Bury, C. R., and Davies, D. G., J. Chem. Soc. 2413 (1932).

Busey, R. H., Dearman, H. H., and Bevan, R. B., Jr., J. Phys. Chem. 66, 82 (1962).

Busey, R. H., and Mesmer, R. E., J. Solution Chem. 5, 147 (1976).

Busey, R. H., and Mesmer, R. E., J. Chem. Eng. Data 23, 175 (1978).

Bushnell, V. C., Hughes, A. M., and Gilbert, E. C., J. Am. Chem. Soc. 59, 2142 (1937).

Cabani, S., Conti, G., Matteoli, E., and Tani, A., Chim. Ind. Genie Chim. 58, 215 (1976).

Calvet, E., J. Chim. Phys. Phys.-Chim. Biol. 30, 140 (1933).

Campbell, A. N., and Bhatnagar, O. N., Can. J. Chem. 50, 1627 (1972).

Campbell, A. N., Fishman, J. B., Rutherford, G., Schaefer, T. P., and Ross, L., Can. J. Chem. 34, 151 (1956).

Campbell, A. N., and Gieskes, J. M. T. M., Can. J. Chem. 43, 1004 (1965).

Campbell, A. N., Kartzmark, E. M., and Bhatnagar, O. N., Can. J. Chem. 52, 1954 (1974).

Cartier, J. P., and Daoust, H., Can. J. Chem. 49, 3935 (1971).

Cases, J. C., Parker, V. B., and Kilday, M. V., J. Res. Nat. Bur. Stand. Sect. A 82, 19 (1977).

Cassel, R. B., and Wen, W. Y., J. Phys. Chem. 76, 1369 (1972).

Cattaneo, C., Nuovo Cimento 26, 50 (1889).

Cerquetti, A., Longhi, P., and Mussini, T., J. Chem. Eng. Data 13, 458 (1968).

Chapas, G., Rev. Gen. Sci. 44, 535 (1933).

Chauvenet, R., C. R. Hebd.. Seances Acad. Sci. 207, 1216 (1938).

Chédin, J., and Dhers, J., J. Mem. Serv. Chim. Etat (Paris) 38, 381 (1953).

Chernen'kaya, E. I., J. Applied Chem. USSR (Eng. Trans) 44, 1562 (1971); Zh. Prikl. Khim. (Leningrad) 44, 1543 (1971 a).

Chernen'kaya, E. I., J. Appl. Chem. USSR (Eng. Trans.) 44, 1744 (1971); Zh. Prikl. Khim. (Leningrad) 44, 1721 (1971 b).

Chernen'kaya, E. I., and Bratash, E. G.,J. Appl. Chem. USSR (Eng. Trans.) 45, 2325 (1972); Zh. Prikl. Khim. (Leningrad) 45, 2218 (1972).

Chernen'kaya, E. I., and Bratash, E. G., J. Appl. Chem. USSR (Eng. Trans.) 48, 1910 (1975); Zh. Prikl. Khim. (Leningrad) 48, 1846 (1975).

Chernyak, E. L., Zh. Obshch. Khim. 8, 1341 (1938).

Chipman, H. R., Johnson, F. M. G., and Maass, O., Trans. Nov. Scotian Inst. Science 17, 149 (1929).

Chomjakow, K., Jaworowskaja, S., and Schirokich, P., Z. Phys. Chem. (Leipzig) A167, 35 (1933).

Ciavatta, L., and Palombari, R., Gazz. Chim. Ital. 102, 1098 (1972).

Clews, C. J. B., Proc. Phys. Soc. London 48, 95 (1936).

Cobb, A. W., and Gilbert, E. C., J. Am. Chem. Soc. 57, 35 (1935).

Cohen, E., Helderman, W. D., and Moesveld, A. L. Th., Z. Phys. Chem. (Leipzig) 96, 259 (1920).

Cohen, E., Helderman, W. D., and Moesveld, A. L. Th., Verh. K. Ned. Akad. Wet. Proc. 27, 565 (1924 a).

Cohen, E., Helderman, W. D., and Moesveld, A. L. T., Z. Phys. Chem. (Leipzig) 112, 135, 141 (1924 b and c).

Cohen, E., and Moesveld, A. L. Th., Z. Phys. Chem. (Leipzig) 95, 305 (1920).

Colomina, M., and Nicolás, J., Anales. Real. Soc. Espan. Fis. Quim. 45B, 137 (1949).

Colson, A., C. R. Hebd. Seances Acad. Sci. 161, 458 (1915).

Cook, R. O., Davies, A., and Staveley, L. A. K., J. Chem. Thermodyn. 3, 907 (1971).

Corkill, J. M., Goodman, J. F., Harrold, S. P., and Tate, J. R., Trans. Faraday Soc. 62, 994 (1966).

Cowperthwaite, I. A., and LaMer, V. K., J. Am. Chem. Soc. 53, 4333 (1931).

Cowperthwaite, I. A., and Shrawder, J., Jr., J. Am. Chem. Soc. 56, 2345 (1934).

Cox, J. D., and Harrop, D., Trans. Faraday Soc. 61, 1328 (1965).

Cox, R. A., and Smith, N. D., Proc. Roy. Soc. London Ser. A 252, 51 (1959).

Craft, Q. D., and Van Hook, W. A., J. Solution Chem. 4, 901 (1975).

Craig, D. N., and Vinal, G. W., J. Res. Nat. Bur. Stand. Sect. A 24, 475 (1940).

Criss, C. M., and Cobble, J. W., J. Am. Chem. Soc. 83, 3223 (1961).

Criss, C. M., and Cobble, J. W., J. Am. Chem. Soc. 86, 5390 (1964).

Danielsson, I., Nelander, S., Sunner, S., and Wadsö, I., Acta Chem. Scand. A 18, 995 (1964).

D'Ans, J., and Tollert, H., Z. Elektrochem. 43, 81 (1937).

Daoust, H., and Lajoie, A., Preprints of papers presented at 169th meeting of the American Chemical Society 35, 353 (1975).

Daoust, H., and Lajoie, A., Can. J. Chem. 54, 1853 (1976).

Davis, W. D., Mason, L. S., and Stegeman, G., J. Am. Chem. Soc. 71, 2775 (1949).

DeForcrand, R., Ann. Chim. Phys. [6] 3, 187 (1884 a).

DeForcrand, R., Ann. Chim. Phys. [6] 3, 242 (1884 b).

Desnoyers, J. E., DeVisser, C., Perron, G., and Picker, P., J. Solution Chem. 5, 605 (1976).

Desnoyers, J. E., Pagé, R., Perron, G., Fortier, J. L., Leduc, P.-A., and Platford, R. F., Can. J. Chem. 51, 2129 (1973).

Desrosiers, N., Perron, G., Mathieson, J. G., Conway, B. E., and Desnoyers, J. E., J. Solution Chem. 3, 789 (1974).

DeVisser, C., and Somsen, G., J. Chem. Soc. Faraday Trans. I 69, 1440 (1973).

Dibrov, I. A., Mal'tsev, G. Z., and Mashovets, V. P., Zh. Prikl. Khim. (Leningrad) 37, 1920 (1964); J. Appl. Chem. USSR (Leningrad) 37, 1907 (1964).

Dickinson, H. C., Mueller, E. F., and George, E. B., Bull. Bur. Stand. (U.S.) 6, 379 (1909).

Doehlemann, E., and Lange, E., Landolt-Börnstein, Physikalisch-Chemische Tabellen Auf. 5, Erg. 3 p. 2800 (1933).

Doehlemann, E., and Lange, E., Z. Physik. Chem. (Leipzig) A170, 391 (1934).

Doehlemann, E., and Lange, E., Z. Elektrochem. 41, 539 (1935 a).

Doehlemann, E., and Lange, E., Z. Physik. Chem. (Leipzig) A173, 295 (1935 b).

Doehlemann, E., Lange, E., and Voll, H., Naturwissenschaften 22, 526 (1934).

Doerinckel, F., Z. Anorg. Allg. Chem. 66, 20 (1910).

Dolar, D., and Skerjanc, J., J. Chem. Phys. 61, 4106 (1974).

Donnan, F. G., and Hope, G. D., Trans. Faraday Soc. 5, 224 (1909).

Drakin, S. I., Lantukhova, L. V., and Karapet'yants, M. Kh., Russ. J. Phys. Chem. (Eng. Trans.) 41, 50 (1967); Zh. Fiz. Khim. 41, 98 (1967).

Drakin, S. I., and Yu-min, C., Russ. J. Phys. Chem. (Eng. Trans.) 38, 1526 (1964); Zh. Fiz. Khim. 38, 2800 (1964).

Drecker, J., Ann. Phys. (Leipzig) 34, 952 (1888).

Drucker, C., Landolt-Börnstein, Auf. 5, Erg. 2 p. 1557 (1931).

Drucker, C., Ark. Kemi, Mineral. Geol. 11A, 1 (1934).

Duer, W. C., Leung, W. H., Oglesby, G. B., and Millero, F. J., J. Solution Chem. 5, 509 (1976).

Dunkelberger, T. H., and Robinson, A. L., J. Am. Chem. Soc. 60, 1301 (1938).

Dunnington, F. P., and Hoggard, T., Am. Chem. J. 22, 207 (1899).

Egan, E. P., and Luff, B. B., J. Phys. Chem. 65, 523 (1961).

Egan, E. P., and Luff, B. B., J. Chem. Eng. Data 8, 181 (1963).

Egan, E. P., and Luff, B. B., J. Chem. Eng. Data 11, 194 (1966).

Egan. E. P., Luff, B. B., and Wakefield, Z. T., J. Phys. Chem. 62, 1091 (1958).

Eigen, M., and Wicke, E., Z. Elektrochem. 55, 354 (1951).

Eigen, M., and Wicke, E., J. Phys. Chem. 58, 702 (1954).

Ellis, J. H., J. Am. Chem. Soc. 38, 737 (1916).

Elmore, K. L., Hatfield, J. D.. Mason, C. M., and Jones, A. D., J. Am. Chem. Soc. 71, 2710 (1949).

Enea, O., Singh, P. P., Woolley, E. M., McCurdy, K. G., and Hepler, L. G., J. Chem. Thermodyn. 9, 731 (1977).

Ensor, D. D., and Anderson, H. L., J. Chem. Eng. Data 18, 205 (1973).

Ensor, D. D., Anderson, H. L., and Conally, T. G., J. Phys. Chem. 78, 77 (1974).

Epikhin, Yu. A., Bazlova, I. V., and Karapet'yants, M. Kh., Russ. J. Phys. Chem. 51, 676 (1977); Zh. Fiz. Khim. 51, 1150 (1977).

Epikhin, Yu. A., and Stakhanova, M. S., Zh. Fiz. Khim. 41, 2148 (1967); Russ. J. Phys. Chem. 41, 1157 (1967).

Epikhin, Yu. A., Stakhanova, M. S., and Karapet'yants, M. Kh., Russ. J. Phys. Chem. 38, 364 (1964); Zh. Fiz. Khim. 38, 692 (1964).

Epikhin, Yu. A., Stakhanova, M. S., and Karapet'yants, M. Kh., Russ. J. Phys. Chem. 40, 201 (1966); Zh. Fiz. Khim. 40, 377 (1966).

Espada, L., Jones, M. N., and Pilcher, G., J. Chem. Thermodyn. 2, 1 (1970).

Everett, D. H., and Wynne-Jones, W. F. K., Trans. Faraday Soc. 35, 1380 (1939).

Ewing, W. W., Brandner, J. D., and Guyer, W. R. F., J. Am. Chem. Soc. 61, 260 (1939).

Ewing, W. W., and Fisher, H. M., J. Am. Chem. Soc. 59, 1046 (1937).

Ewing, W. W., Glick, C. F., and Rasmussen, H. E., J. Am. Chem. Soc. 64, 1445 (1942).

Ewing, W. W., and Guyer, W. R. F., J. Am. Chem. Soc. 60, 2707 (1938).

Ewing, W. W., Klinger, E., and Brandner, J. D., J. Am. Chem. Soc. 56, 1053 (1934).

Ewing, W. W., and Rogers, A. N., J. Am. Chem. Soc. 55, 3605 (1933).

Ewing, W. W., Rogers, A. N., Miller, J. Z., and McGovern, E., J. Am. Chem. Soc. 54, 1335, 4763 (1932).

Faasch, H., Landolt-Börnstein. Neue Serie. Band 1, Teil b, p. 227 (1977 a).

Faasch, H., Landolt-Börnstein, Neue Serie. Band 1, Teil b, p. 271 (1977 b).

Faletti, D. W., Herrick, I. W., and Adams, M. F., J. Electrochem. Soc. 116, 698 (1969).

Falk, B., and Sunner, S., J. Chem. Thermodyn. 5, 553 (1973).

Faucon, A., Ann. Chim. Phys. [7] 19, 70 (1910).

Favre, P. A., and Silbermann, J. T., Ann. Chim. Phys. [3] 37, 406 (1853).

Fedorov, A. S., and Sil'chenko, G. F., Ukr. Khem. Zh. 12, 53 (1937).

Fedyainov, N. V., Vasil'ev, V. A., and Karapet'yants, M. Kh., Zh. Fiz. Khim. 44, 1817 (1970); Russ. J. Phys. Chem. (Eng. Trans.) 44, 1026 (1970).

Fontell, N., Soc. Sci. Fenn. Commentat. Phys. Math. 10, No. 5, 18 pp (1938).

Forsythe, W. R., and Giauque, W. F., J. Am. Chem. Soc. 64, 48 (1942).

Fortier, J.-L., and Desnoyers, J. E., J. Solution Chem. 5, 297 (1976).

Fortier, J.-L., Leduc, P.-A., and Desnoyers, J. E., J. Solution Chem. 3, 323 (1974).

Fortier, J.-L., Leduc, P.-A., Picker, P., and Desnoyers, J. E., J. Solution Chem. 2, 467 (1973).

Fortier, J.-L., Philip, P. R., and Desnoyers, J. E., J. Solution Chem. 3, 523 (1974).

Fricke, R., and Havestadt, L., Z. Electrochem. 33, 441 (1927).

Fricke, R., and Lüke, J., Z. Electrochem. 35, 631 (1929).

Galinker, I. S., and Belova, N. A., J. Gen. Chem. USSR (Eng. Trans.) 33, 3047 (1963); Zh. Obshch. Khim. 33, 3119 (1963).

Gardner, E. R., Tran. Faraday Soc. 65, 91 (1969).

Gardner, W. L., Jekel, E. C., and Cobble, J. W., J. Phys. Chem. 73, 2017 (1969).

Gardner, E. R., Jones, P. J., and de Nordwall, H. J., Trans. Faraday Soc. 59, 1994 (1963).

Gardner, W. L., Mitchell, R. E., and Cobble, J. W., J. Phys. Chem. 73, 2025 (1969).

Gatty, O., Philos. Mag. 18, 46 (1934).

Gawlik, H. Z., Ver. Deut. Ing. 79, 1089 (1935).

Gawlik, H., Landolt-Börnstein, Neue Serie. Band 1, Teil b, p. 274 (1977).

Gelles, E., and Nancollas, G. H., Trans. Faraday Soc. 52, 98 (1956).

Gerlach, H., Caliche. Santiago, 8, 298 (1926).

Giaugue, W. F., Barieau, R. E., and Kunzler, J. E., J. Am. Chem. Soc. 72, 5685 (1950).

Giaugue, W. F., Hornung, E. W., Kunzler, J. E., and Rubin, T. R., J. Am. Chem. Soc. 82, 62 (1960).

Gibbard, H. F., Jr., Scatchard, G., Rousseau, R. R., and Creek, J. L., J. Chem. Eng. Data 19, 281 (1974).

Gier, L. J., and Vanderzee, C. E., J. Chem. Eng. Data 19, 315 (1974 a).

Gier, L. J., and Vanderzee, C. E., J. Chem. Eng. Data 19, 323 (1974 b).

Gier, L. G., and Vanderzee, C. E., J. Chem. Eng. Data 20, 259 (1975).

Gilbert, E. C., and Bushnell, V. C., J. Am. Chem. Soc. 57, 2611 (1935).

Ginzburg, D. M., Zh. Fiz. Khim. 33, 1087 (1959).

Ginzburg, D. M., Zh. Fiz. Khim. 36, 747 (1962).

Ginzburg, D. M., and Kochkalda, V. E., Russ. J. Phys. Chem. (Eng. Trans.) 46, 1226 (1972); Zh. Fiz. Khim. 46, 2142 (1972 a).

Ginzburg, D. M., and Kochkalda, V. E., Russ. J. Phys. Chem. (Eng. Trans.) 46, 1535 (1972); Zh. Fiz. Khim. 46, 2677 (1972 b).

Ginzburg, D. M., and Kochkalda, V. E., Russ. J. Phys. Chem. (Eng. Trans.) 50, 1782 (1976); Zh. Fiz. Khim. 50, 2991 (1976).

Ginzburg, D. M., Kochkalda, V. E., and Guba, N. I., Russ. J. Phys. Chem. (Eng. Trans.) 47, 1214 (1973); Zh. Fiz. Khim. 47, 2145 (1973).

Ginzburg, D. M., Kochkalda, V. E., and Ved', V. N., Russ. J. Phys. Chem. (Eng. Trans.) 50, 330 (1976); Zh. Fiz. Khim. 50, 558 (1976).

Glagoleva, A. A., Zh. Obsh. Khim. 6, 1769 (1936).

Glagoleva, A. A., and Cherbov, S. I., Zh. Obshch. Khim. 6, 685 (1936).

Goddard, E. D., and Benson, G. C., Trans. Faraday Soc. 52, 409 (1956).

Goddard, E. D., Hoeve, C. A. J., and Benson, G. C., J. Phys. Chem. 61, 593 (1957).

Goldberg, R. N., and Hepler, L. G., J. Phys. Chem. 72, 4654 (1968).

Goldberg, R. N., Riddell, R. G., Wingard, M. R., Hopkins, H. P., Wulff, C. A., and Hepler, L. G., J. Phys. Chem. 70, 706 (1966).

Graham, T., Philos. Mag. 22, 329 (1843).

Grau, R., and Roth, W. A., Landolt-Börnstein Physikalisch-Chemische Tabellen, Auf. 5, Erg. 2, p. 1550 (1931).

Greeley, R. S., Smith, W. T., Jr., Stoughton, R. W., and Lietzke, M. H., J. Phys. Chem. 64, 652 (1960).

Grenthe, I., Hessler, G., and Ots, H., Acta. Chem. Scand. 27, 2543 (1973).

Grenthe, I., Ots, H., and Ginstrup, O., Acta. Chem. Scand. 24, 1067 (1970).

Grigor'eva, E. G., Latysheva, V. A., and Shchukarev, S. A., J. Struct. Chem. (Eng. Trans.) 18, 232 (1977); Zh. Strukt. Khim. 18, 291 (1977).

Gritsus, B. V., Akhumov, E. I., and Zhilina, L. P., J. Appl. Chem. USSR (Eng. Trans.) 42, 183 (1969); Zh. Prikl. Khim. (Leningrad) 42, 208 (1969).

Gritsus, B. V., Akhumov, E. I., and Zhilina, L. P., J. Appl. Chem. USSR (Eng. Trans.) 44, 179 (1971); Zh. Prikl. Khim. (Leningrad) 44, 186 (1971).

Grzybowski, A. K., J. Phys. Chem. 62, 550 (1958).

Gucker, F. T., Jr., J. Am. Chem. Soc. 50, 1005 (1928).

Gucker, F. T., Jr., Ann. N. Y. Acad. Sci. 51, 680 (1949).

Gucker, F. T., Jr., and Allen, T. W., J. Am. Chem. Soc. 64, 191 (1942).

Gucker, F. T., Jr., Ayres, F. D., and Rubin, T. R., J. Am. Chem. Soc. 58, 2118, 2661 (1936).

Gucker, F. T., Jr., Ford, W. L., and Moser, C. E., J. Phys. Chem. 43, 153 (1939).

Gucker, F. T., Jr., Pickard, H. B., and Ford, W. L., J. Am. Chem. Soc. 62, 2698 (1940).

Gucker, F. T., Jr., and Rubin, T. R., J. Am. Chem. Soc. 57, 78 (1935).

Gucker, F. T., Jr., and Schminke, K. H., J. Am. Chem. Soc. 54, 1358 (1932).

Gucker, F. T., Jr., and Schminke, K. H., J. Am. Chem. Soc. 55, 1013 (1933).

Gulbransen, E. A., and Robinson, A. L., J. Am. Chem. Soc. 56, 2637 (1934).

Gumlich, E., and Wiebe, H. F., Z. Kompr. Fluess. Gase 2, 39 (1898).

Guntz, A., C. R. Hebd.. Seances Acad. Sci. 96, 1659 (1883).

Guntz, A., Ann. Chim. Phys. [6] 3, 5 (1884).

Gupta, S. R., Hills, G. J., and Ives, D. J. G., Trans. Faraday Soc. 59, 1886 (1963).

Haltenberger, W., Jr., Ind. Eng. Chem. 31, 783 (1939).

Hamer, W. J., J. Am. Chem. Soc. 57, 9 (1935).

Hamilton, D., and Stokes, R. J., J. Solution Chem. 1, 223 (1972).

Hammerschmid, H., and Lange, E., Landolt-Börnstein Physikalisch-Chemische Tabellen, Auf. 5, Erg. 2 p. 1537 (1931).

Hammerschmid, H., and Lange, E., Z. Phys. Chem. (Leipzig) A160, 445 (1932).

Hammerschmid, H., and Robinson, A. L., J. Am. Chem. Soc. 54, 3120 (1932).

Hannan, M. C., Dissertation, The Catholic University of America, Washington, DC (1936).

Harned, H. S., J. Am. Chem. Soc. 59, 360 (1937).

Harned, H. S., and Cook, M. A., J. Am. Chem. Soc. 59, 495 (1937 a).

Harned, H. S., and Cook, M. A., J. Am. Chem. Soc. 59, 1290 (1937 b).

Harned, H. S., and Ehlers, R. W., J. Am. Chem. Soc. 54, 1350 (1932).

Harned, H. S., and Ehlers, R. W., J. Am. Chem. Soc. 55, 2179 (1933).

Harned, H. S., and Fitzgerald, M. E., J. Am. Chem. Soc. 58, 2624 (1936).

Harned, H. S., and Hamer, W. J., J. Am. Chem. Soc. 57, 27 (1935).

Harned, H. S., and Hecker, J. C., J. Am. Chem. Soc. 55, 4838 (1933).

Harned, H. S., and Hecker, J. C., J. Am. Chem. Soc. 56, 650 (1934).

Harned, H. S., Keston, A. S., and Donelson, J. G., J. Am. Chem. Soc. 58, 989 (1936).

Harned, H. S., and Nims, L. F., J. Am. Chem. Soc. 54, 423 (1932).

Harrison, W. R., and Perman, E. P., Trans. Faraday Soc. 23, 1 (1927).

Hartung, E. J., Trans. Faraday Soc. 11, 64 (1915).

Hattox, E. H., and DeVries, T., J. Am. Chem. Soc. 58, 2126 (1936).

Hayes, J. C., and Lietzke, M. H., J. Phys. Chem. 64, 374 (1960).

Hayward, A. M., and Perman, E. P., Trans. Faraday Soc. 27, 59 (1931).

Hepler, L. G., Sweet, J. R., and Jesser, R. A., J. Am. Chem. Soc. 82, 304 (1960).

Hess, C. B., J. Phys. Chem. 45, 755 (1941).

Hess, C. B., and Gramkee, B. E., J. Phys. Chem. 44, 483 (1940).

Hetzer, H. B., Robinson, R. A., and Bates, R. G., J. Phys. Chem. 66, 1423 (1962).

Heuvelsland, W. J. M., and Somsen, G., J. Chem. Thermodyn. 8, 873 (1976).

Hildenbrand, D. L., and Giauque, W. F., J. Am. Chem. Soc. 75, 2811 (1953).

Holsboer, H. B., Z. Phys. Chem. (Leipzig) 39, 691 (1902).

Hopkins, H. P., Duer, W. C., and Millero, F. J., J. Solution Chem. 5, 263 (1976).

Hornibrook, W. J., Janz, G. J., and Gordon, A. R., J. Am. Chem. Soc. 64, 513 (1942).

Hornung, E. W., and Giauque, W. F., J. Am. Chem. Soc. 77, 2744 (1955).

Hugus, Z. Z., Jr., and Latimer, W. M., J. Electrochem. Soc. 98, 296 (1951).

Hunter, J. B., and Bliss, H., Ind. Eng. Chem. 36, 945 (1944).

Hutchinson, E., Manchester, K. E., and Winslow, L., J. Phys. Chem. 58, 1124 (1954).

Hutchinson, E., and Winslow, L., J. Phys. Chem. 60, 122 (1956).

Hüttig, G. F., and Wehling-Jena, H., Kolloidchem. Beih. 23, 354 (1926).

Irani, R. R., and Taulli, T. A., J. Inorg. Nucl. Chem. 28, 1011 (1966).

Ise, N., Mita, K., and Okubo, T., J. Chem. Soc. Faraday Trans. I 69, 106 (1973).

Ishikawa, F., and Ueda, Y., Sci. Rep. Tohoku Univ. Ser. I 22, 263 (1933).

Izatt, R. M., Eatough, D. J., Morgan, C. E., and Christensen, J. J., J. Chem. Soc. A, 2514 (1970).

Jackson, N. S., Smith, A. E. C., Gatty, O., and Wolfenden, J. H., J. Chem. Soc. 1376 (1934).

Jahn-Held, W., and Jellinek, K., Z. Elektrochem. 42, 608 (1936).

Jakli, G., Chan, T. C., and Van Hook, W. A., J. Solution Chem. 4, 71 (1975).

Jakli, G., and Van Hook, W. A., J. Chem. Eng. Data 17, 348 (1972).

Janz, G. J., and Gordon, A. R., J. Am. Chem. Soc. 65, 218 (1943).

Jaquerod, A. J., J. Chim. Phys. Phys.-Chim. Biol. 7, 129 (1909).

Jauch, K., Z. Phys. 4, 441 (1921).

Jekel, E. C., Criss, C. M., and Cobble, J. W., J. Am. Chem. Soc. 86, 5404 (1964).

Johnson, E. F., Jr., and Molstad, M. C., J. Phys. Chem. 55, 257 (1951).

Johnson, G. K., Smith, P. N., and Hubbard, W. N., J. Chem. Thermodyn. 5, 793 (1973).

Johnson, W. H., Gilliland, A. A., and Prosen, E. J., J. Res. Nat. Bur. Stand. Sect. A 63, 161 (1959).

Jolicoeur, C., and Boileau, J., J. Solution Chem. 3, 889 (1974).

Jolicoeur, C., Boileau, J., Bazinet, S., and Picker, P., Can. J. Chem. 53, 716 (1975).

Jolicoeur, C., and Philip, P. R., J. Solution Chem. 4, 3 (1975).

Jolicoeur, C., Philip, P. R., Perron, G., Leduc, P.-A., and Desnoyers, J. E., Can. J. Chem. 50, 3167 (1972).

Joly, R. D., Thourey, J., and Pérachon, G., C. R. Hebd. Seances Acad. Sci. 277C, 1179 (1973).

Jones, F. R., and Wood, R. H., J. Phys. Chem. 67, 1576 (1963).

Jones, G. P., and Lee, D. A., J. Chem. Thermodyn. 2, 760 (1970).

Jones, M. N., Agg, G., and Pilcher, G., J. Chem Thermodyn. 3, 801 (1971).

Jones, M. N., and Piercy, J., Kolloid Z. Z. Polym. 251, 343 (1973).

Jones, M. N., Pilcher, G., and Espada, L. J., J. Chem. Thermodyn. 2, 333 (1970).

Jongenburger, H. S., and Wood, R. H., J. Phys. Chem. 69, 4231 (1965).

Kablukov, I. A., and Zagwosdkin, Z. Anorg. Allg. Chem. 224 315 (1935).

Kaganovich, Yu. Ya., and Mishchenko, K. P., J. Gen. Chem. USSR (Engl. Trans.) 21, 29 (1951); Zh. Obshch. Khim. 21, 28 (1951).

Kaganovich, Yu. Ya., and Mishchenko, K. P., Dokl. Akad. Nauk. SSSR 87, 89 (1952).

Kangro, W., and Flügge, R., Z. Phys. Chem. (Leipzig) A175, 187 (1935).

Kangro, W. O., and Groeneveld, A., Z. Phys. Chem. (Frankurt am Maim) 32, 110 (1962).

Kapustinsky, A., Acta Physicochim. URSS 14, 503 (1941).

Kapustinsky, A., Acta Physicochim. URSS 17, 152 (1942 a).

Kapustinsky, A. F., Zh. Obshch. Khim. 12, 180 (1942 b).

Kapustinsky, A. F., Zh. Fiz. Khim. 15, 220 (1941).

Kapustinsky, A. F., and Dezideryeva, I. P., Trans. Faraday Soc. 42, 69 (1946).

Kapustinsky, A. F., Drakin, S. I., and Yakushevskii, B. M., Zh. Fiz. Khim. 27, 433 (1953).

Kapustinsky, A. F., and Klokman, V. P., Izv. Akad. Nauk. SSR. Ser. Khim. Nauk. No. 4, 259 (1943).

Kapustinsky, A. F., and Lipilina, I. I., Doklad. Akad. Nauk. SSSR 104, 264 (1955).

Kapustinsky, A. F., Lipilina, I. I., and Samoilov, O. Ya., Zh. Fiz. Khim. 30, 896 (1956).

Kapustinsky, A. F., Lipilina, I. I., and Samoilov, O. Ya., J. Chim. Phys. Phys.-Chim. Biol. 54, 343 (1957).

Kapustinsky, A. F., and Samoilov, O. Ya., Izvest. Akad. Nauk. SSR, Ser. Khim. Nauk No. 5, 471 (1946).

Kapustinsky, A. F., and Stakhanova, M. S., Izv. Vyssh. Ucheb. Zaved. Khim. Khim. Tekhnol. No. 3, 7 (1958).

Kapustinsky, A. F., Stakhanova, M. S., and Vasil'ev, V. A., Bull. Acad. Sci. USSR, Div. Chem. Sci. 1932 (1960); Izv. Akad. Nauk SSSR, Ser. Khim. 2082 (1960).

Kapustinsky, A. F., Yakushevskii, B. M., and Drakin, S. I., Zh. Fiz. Khim. 27, 588 (1953 a).

Kapustinsky, A. F., Yakushevskii, B. M., and Drakin, S. I., Zh. Fiz. Khim. 27, 793 (1953 b).

Karapet'yants, M. Kh., Drakin, S. I., and Lantukhova, L. V., Zh. Fiz. Khim. 41, 2653 (1967); Russ. J. Phys. Chem. (Eng. Trans.) 41, 1436 (1967).

Karapet'yants, M. Kh., Vasil'ev, V. A., and Fedyainov, N. V., Trudy Moskov. Khim.-Tekhnol. Inst. No. 62, 67 (1969).

Karapet'yants, M. Kh., Vasil'ev, V. A., and Fedyainov, N. V., Zh. Fiz. Khim. 44, 1822 (1970); Russ. J. Phys. Chem. (Eng. Trans.) 44, 1028 (1970).

Karapet'yants, M. Kh., Vasil'ev, V. A., and Fedyainov, N. V., Russ. J. Phys. Chem. (Eng. Trans.) 45, 1349 (1971); Zh. Fiz. Khim. 45, 2378 (1971).

Karapet'yants, M. Kh., Vasil'ev, V. A., and Novikov, S. N., Russ. J. Phys. Chem. (Eng. Trans.) 50, 622 (1976); Zh. Fiz. Khim. 50, 1031 (1976).

Karapet'yants, M. Kh. Vasil'ev, V. A., and Sanaev, E. S., Russ. J. Phys. Chem. (Eng. Trans.) 51, 1281 (1977); Zh. Fiz. Khim. 51, 2180 (1977).

Karve, D. D., J. Indian Chem. Soc. 1-2, 247 (1924-25).

Kasner, F., Thesis, Univ. of Chicago (1962).

Katzin, L. I., Simon, D. M., and Ferraro, J. R., J. Am. Chem. Soc. 74, 1191 (1952).

Keevil, N. B., J. Am. Chem. Soc. 64, 841 (1942).

Kharbanda, O. P., Ind. Chemist. 33, 136 (1957).

Khomyakov, K. G., Yavoroskaya, S. F., and Shirokikh, P. K., Moscow Nauchno-issledov.Institut. Poud. i. Insektofung. Trudy No. 110, 34 (1933).

Khrenova, T. L., and Akhumov, E. I., Zh. Prikl. Khim. (Leningrad) 42, 2597 (1969).

Kilday, M. V., and Prosen, E. J., J. Res. Nat. Bur. Stand. Sect. A 68, 127 (1964).

Kirkbride, B. J., and Wyatt, P. A. H., Trans. Faraday Soc. 54, 483 (1958).

Kiyama, R., and Kitahara, S., Rev. Phys. Chem. Japan 27, 48 (1957).

Klibanova, Ts. M., and Neiman, M. B., Zh. Fiz. Khim. 4, 1 (1933).

Klopov, V. I., Kolker, A. M., and Krestov, G. A. Russ. J. Phys. Chem. (Eng. Trans.) 46, 1235 (1972); Zh. Fiz. Khim. 46, 2155 (1972).

Klopov, V. I., Kolker, A. M., and Krestov, G. A., Izv. Vyssh. Ucheb. Zaved. Khim. Khim. Tekhnol. 17, 32 (1974).

Klopov, V. I., Kolker, A. M., and Krestov, G. A., J. Struct. Chem. (Eng. Trans.) 16, 276 (1975); Zh. Strukt. Khim. 16, 297 (1975).

Knietsch, R., Chem. Ber. 34, 4069 (1901).

Kobe, K. A., and Anderson, C. H., J. Phys. Chem. 40, 429 (1936).

Koch, W., Z. Ges. Kaelte-Ind. 29, 37 (1922).

Kolesov, V. P., Skuratov, S. M., and Uvarov, V. Ya., Zh. Neorg. Khim. 5, 1934 (1960); Russ. J. Inorg. Chem. (Eng. Trans.) 5, 943 (1960 a).

Kolesov, V. P., Skuratov, S. M., and Uvarov, V. Y., Zh. Neorg. Khim. 5, 1937 (1960 b); Russ. J. Inorg. Chem. (Eng. Trans.) 5, 943 (1960).

Kolker, A. M., Krestov, G. A., and Klopov, V. I., Russ. J. Phys. Chem. (Eng. Trans.) 50, 1459 (1976); Zh. Fiz. Khim. 50, 2433 (1976).

Konicek, I., and Wadsö, I., Acta. Chem. Scand. 25, 1541 (1971).

Kovryrzina, V. P., Sidorova, E. E., Zahkarova, T. N., and Berg, L. G., Russ. J. Phys. Chem. (Eng. Trans.), 40, 809 (1966).

Kratz, H., and Lange, E., Landolt-Börnstein Physiklalish-Chemische Tabellen, Auf. 5, Erg. 3 p. 2807 (1933).

Kresheck, G. C., J. Chem. Phys. 52, 5966 (1970).

Kresheck, G. C., and Benjamin, L., J. Phys. Chem. 68, 2476 (1964).

Krestov, G. A., and Abrosimov, V. K., Izv. Vyssh. Ucheb. Zaved. Khim. Khim. Tekhnol. 10, 1005 (1967).

Krestov, G. A., Kobenin, V. A., and Semenovskii, S. V., Russ. J. Inorg. Chem. (Eng. Trans.) 17, 421 (1972); Zh. Neorg. Khim. 17, 805 (1972).

Krestov, G. A., Kobenin, V. A., and Semenovskii, S. V., Zh. Neorg. Khim. 18, 3 (1973); Russ. J. Inorg. Chem. (Eng. Trans.) 18, 1 (1973).

Krey, J., Z. Phys. Chem. (Frankfurt am Maim) 81, 252 (1972).

Krivtsov, N. V., Rosolovskii, V. Ya., and Zinov'ev, A. A., Zh. Neorg. Khim. 5, 772 (1960).

Krumgal'z, B. S., and Mashovets, V. P., Zh. Prikl. Khim. (Leningrad) 37, 2750 (1964); J. Appl. Chem. USSR (Eng. Trans.) 37, 2712 (1964).

Kul'ba, F. Ya., Yakovlev, Yu. B. and Kopylov, E. A., Russ. J. Phys. Chem. (Eng. Trans.) 47, 342 (1973); Zh. Fiz. Khim. 47, 606 (1973).

Kunzler, J. E., and Giauque, W. F., J. Am. Chem. Soc. 74, 3472 (1952).

Küpper, Mitt. Kali-Forsch.-Anst. 6, 85 (1920).

Labowitz, L. C., and Westerum, E. F., Jr., J. Phys. Chem. 65, 408 (1961).

LaMer, V. K., and Cowperthwaite, I. A., J. Am. Chem. Soc. 55, 1004 (1933).

LaMer, V. K., and Parks, W. G., J. Am. Chem. Soc. 55, 4343 (1933); J. Am. Chem. Soc. 56, 2795 (1934).

Lange, E., Fortschr. Chem. Phys. Phys. Chem. 19, 1 (1928).

Lange, E., in "The Structure of Electrolytic Solutions," (W. J. Hamer, ed.), John Wiley and Sons, Inc. New York, NY (1959).

Lange, E., and Dürr, F., Z. Phys. Chem. (Leipzig) 121, 361 (1926).

Lange, E., and Eichler, A., Z. Phys. Chem. (Leipzig) 129, 285 (1927).

Lange, E., and Hesse, Th., Landolt-Börnstein Physikalisch Chemische Tabellen, Auf. 5 Erg. 2 p. 1538 (1931).

Lange, E., and Leighton, P. A., Z. Elektrochem. 34, 566 (1928).

Lange, E., and Leighton, P. A., Landolt-Börnstein Physikalisch Chemische Tabellen, Auf. 5 Erg, 2 p. 1536 (1931).

Lange, E., and Meixner, J., Phys. Z. 30, 670 (1929 a).

Lange, E., and Meixner, J., Naturwissenschaften 17, 273 (1929 b).

Lange, E., and Messner, G., Z. Elektrochem. 33, 431 (1927 a).

Lange, E., and Messner, G., Naturwissenschaften 15, 521 (1927 b).

Lange, E., and Miederer, W., Z. Elektrochem. 60, 34 (1956 a).

Lange, E., and Miederer, W., Z. Elektrochem. 60, 362 (1956 b).

Lange, E., and Miederer, W., Z. Elektrochem. 61, 403 (1957 a).

Lange, E., and Miederer, W., Z. Elektrochem. 61, 407 (1957 b).

Lange, E., and Miederer, W., Z. Elektrochem. 61, 470 (1957 c).

Lange, E., and Mishchenko, K. P., Z. Phys. Chem. (Leipzig) A148, 161 (1930).

Lange, E., and Monheim, J., Z. Elektrochem. 35, 29 (1929).

Lange, E., and Monheim, J., Z. Phys. Chem. (Leipzig) A149, 51 (1930 a).

Lange, E., and Monheim, J., Z. Phys. Chem. (Leipzig) A150, 349 (1930 b).

Lange, E., and Monheim, J., Z. Elektrochem. 36, 772 (1930 c).

Lange, E., and Monheim, J., Naturwissenschaften 21, 24 (1933).

Lange, E., Monheim, J., and Robinson, A. L., J. Am. Chem. Soc. 55, 4733 (1933).

Lange, E., Monheim, J., and Streeck, H., Landolt-Börnstein Physikalisch Chemische Tabellen, Auf. 5 Erg. 2 p. 1544 (1931).

Lange, E., and Robinson, A. L., Z. Phys. Chem. (Leipzig) A148, 97 (1930).

Lange, E., and Robinson, A. L., Chem. Rev. 9, 89 (1931 a).

Lange, E., and Robinson, A. L., Landolt-Börnstein Physikalisch Chemische Tabellen, Auf. 5 Erg. 2 p. 1539 (1931 b).

Lange, E., and Schwartz, E., Z. Phys. Chem. (Leipzig) 133, 129 (1928)

Lange, E., and Secrest, D., Z. Elektrochem. 61, 280 (1957).

Lange, E., and Streeck, H., Z. Phys. Chem. (Leipzig) A152, 1 (1931 a).

Lange, E., and Streeck, H., Z. Phys. Chem. (Leipzig) A157, 1 (1931 b).

Larson, J. W., J. Phys. Chem. 74, 3392 (1970).

Latysheva, V. A., Russ. Chem. Rev. (Engl. Trans.) 42, 803 (1973); Usp. Khim. 42, 1757 (1973).

Latysheva, V. A., and Andreeva, I. N., Vestn. Leningr. Univ. Fiz. Khim. 3, 63 (1975).

Latysheva, V. A., and Karavan, S. V., Zh. Fiz. Khim. 42, 2338 (1968); Russ. J. Phys. Chem. (Eng. Trans.) 42, 1238 (1968).

Leduc, P.-A., and Desnoyers, J. E., Can. J. Chem. 51, 2993 (1973).

Leduc. P.-A., Fortier, J.-L., and Desnoyers, J. E., J. Phys. Chem. 78, 1217 (1974).

Leitner, A., Archiv. fur Warmewirtschaft und Dampfkesselwesen 9, 233 (1928).

Leitner, A., Landolt-Börnstein Physikalisch Chemische Tabellen, Auf. 5, Erg. 2 p. 1192 (1931).

Lemoine, G., C. R. Hebd. Seances Acad. Sci. 125, 603 (1897).

Lerner-Steinberg, B., Z. Phys. Chem. (Leipzig) A122, 121 (1926).

Leung, W. H., and Millero, F. J., J. Chem. Thermodyn. 7, 1067 (1975).

Levine, A. S., and Lindenbaum, S., J. Solution Chem. 2, 445 (1973).

Levine, A. S., and Wood, R. H., J. Chem. Eng. Data 15, 33 (1970).

Levine, A. S., and Wood, R. H., J. Phys. Chem. 77, 2390 (1973).

Lietzke, M. H., and Stoughton, R. W., J. Am. Chem. Soc. 78, 4520 (1956).

Likke, S., and Bromley, L. A., J. Chem. Eng. Data 18, 189 (1973).

Lilich, L. C., and Chernykh, L. V., Vestn. Lening. Univ. Fiz. Khim. No. 16, 103 (1966).

Lilley, T. H., and Scott, R. P., J. Chem. Soc. Faraday Soc. I 72, 184 (1976).

Lindenbaum, S., J. Phys. Chem. 70, 814 (1966).

Lindenbaum, S., J. Phys. Chem. 73, 4334 (1969).

Lindenbaum, S., J. Chem. Thermodyn. 3, 625 (1971 a).

Lindenbaum, S., J. Phys. Chem. 75, 3733 (1971 b).

Lindsay, W. T., Jr., and Liu, C. T., J. Phys. Chem. 75, 3723 (1971).

Lindsay, W. T., Jr., and Liu, C. T., Vapor Pressure Lowering of Aqueous Solutions at Elevated Temperature, Res. and Development Prog. Rept. No. 347 for the Office of Saline Water of the U.S. Department of Interior, U.S. Government Printing Office, Washington, DC (1968).

Liphard, K. G., Jost, A., and Schneider, G. M., J. Phys. Chem. 81, 547 (1977).

Lipsett, S. G., Johnson, M. F. G., and Maass, O., J. Am. Chem. Soc. 49, 925 (1927 a).

Lipsett, S. G., Johnson, M. F. G., and Maass, O., J. Am. Chem. Soc. 49, 1940 (1927 b).

Liu, C. T., and Lindsay, W. T., Jr., J. Phys. Chem. 74, 341 (1970).

Liu, C. T., and Lindsay, W. T., Jr., J. Solution Chem. 1, 45 (1972).

Lloyd, L., and Wyatt, P. A. H., J. Chem. Soc., 4262 (1957).

Logwinienko, R., Taniewska-Osinska, S., and Pluta, M., Acta Chemica Lodz 18, 25 (1972).

Longhi, P., Mussini, T., and Vaghi, E., J. Chem. Thermodyn. 7, 767 (1975).

Lonkevich, I. I., Mishchenko, K. P., and Shadskii, S. V., J. Gen. Chem. USSR (Eng. Trans.) 39, 1181 (1969); Zh. Obshch. Khim. 39, 1210 (1969).

LoSurdo, A., Wen, W.-Y., Jolicoeur, C., and Fortier, J.-L., J. Phys. Chem. 81, 1813 (1977).

Löwer, H., Kaltetechnik 13, 178 (1961).

Lüdeking, C., Ann. Phys. (Leipzig) 27, 72 (1886).

Luff, B. B., and Reed, R. B., J. Chem. Eng. Data 23, 56 (1978).

Luff, B. B., Reed, R. B., and Wakefield, Z. T., J. Chem. Eng. Data 16, 342 (1971).

McAuley, A., and Nancollas, G. H., J. Chem. Soc., 4458 (1961).

McAuley, A., and Nancollas, G. H., J. Chem. Soc., 2215 (1961).

McCurdy, J. L., and McKinely, C., Ind. Eng. Chem. 34, 1002 (1942).

McLeod, H. G., and Gordon, A. R., J. Am. Chem. Soc. 68, 58 (1946).

Macaskill, J. B., Robinson, R. A., and Bates, R. G., J. Solution Chem. 6, 385 (1977).

Magie, W. F., Phys. Rev. 25, 171 (1907).

Magie, W. F., Phys. Rev. 35, 265 (1912).

Marcus, Y., J. Chem. Eng. Data 20, 141 (1975).

Marignac, C., Arch. Sci. Phys. Nat. 55, 113 (1876).

Marignac, C., Ann. Chim. Phys. 8, 410 (1878).

Marshall, W. L., and Slusher, R., J. Inorg. Nucl. Chem. 38, 279 (1976).

Mashovets, V. P., Baron, N. M., and Zavodnaya, G. E., J. Struct. Chem. (Eng. Trans.) 7, 770 (1966); Zh. Strukt. Khim. 7, 825 (1966).

Mashovets, V. P., Dibrov, I. A., and Kurmgal'z, B. S., Russ. J. Phys. Chem. (Eng. Trans.) 39, 912 (1965); Zh. Fiz. Khim. 39, 1723 (1965).

Mashovets, V. P., Krumgal'z, B. S., and Dibrov, I. A., Russ. J. Phys. Chem. (Eng. Trans.) 39, 1326 (1965); Zh. Fiz. Khim. 39, 1723 (1965).

Mashovets, V. P., Krumgal'z, B. S., Dibrov, I. A., and Metveeva, R. P., Zh. Prikl. Khim. (Leningrad) 38, 2342 (1965); J. Appl. Chem. USSR (Eng. Trans.) 38, 2294 (1965).

Mashovets, V. P., Matveeva, R. P., Puchkov, L. V., and Fedorov, M. K., J. Appl. Chem. USSR (Eng. Trans.) 46, 2080 (1973); Zh. Prikl. Khim. (Leningrad) 46, 1954 (1973).

Mashovets, V. P., Puchkova, L. V., and Matveeva, R. P., J. Appl. Chem. USSR (Eng. Trans.) 40, 2475 (1962); Zh. Prikl. Khim. (Leningrad) 40, 2588 (1967).

Mashovets, V. P., Zarembo, V. I., and Fedorov, M. K., Zh. Prikl. Khim. (Leningrad) 46, 650 (1973); J. Appl. Chem. USSR (Eng. Trans.) 46, 684 (1973).

Mason, L. S., Offutt, W. F., and Robinson, A. L., J. Am. Chem. Soc. 71, 1463 (1949).

Mason, L. S., and Robinson, A. L., J. Am. Chem. Soc. 69, 889 (1947).

Mastroianni, M., and Criss, C. M., J. Chem. Eng. Data 17, 222 (1972 a).

Mastroianni, M., and Criss, C. M., J. Chem. Thermodyn. 4, 321 (1972 b).

Mathias, E., Ann. Chim. Phys. [5], 21, 90 (1890).

Mayrath, J., and Wood, R. H., (1978) personal communication. To be published.

Messikomer, E. E., and Wood, R. H., J. Chem. Thermodyn. 7, 119 (1975).

Meyerhof, O., Biochim. Z. 129, 594 (1922).

Mikulin, G. I., Novoselov, N. P., and Mishchenko, K. P., Izv. Vys. Ucheb. Zaved. Khim. Khim. Tekhnol. 13, 1433 (1970).

Mishchenko, K. P., Z. Elektrochem. 36, 777 (1930).

Mishchenko, K. P., Landolt-Börnstein Physikalisch-Chemische Tabellen, Auf. 5, Erg. 2 p. 1657 (1931).

Mishchenko, K. P., and Podgornaya, E. A., J. Gen. Chem. USSR (Eng. Trans.) 31, 1628 (1961); Zh. Obshch. Khim. 31, 1743 (1961).

Mishchenko, K. P., and Ponomareva, A. M., Zh. Fiz. Khim. 26, 998 (1952).

Mishchenko, K. P., and Ponomareva, A. M., Zh. Obshch. Khim. 26, 1296 (1956).

Mishchenko, K. P., and Pronina, M. Z., Zh. Obshch. Khim. 6, 85 (1936).

Mishchenko, K. P., and Shpigel', L. P., J. Gen. Chem. USSR (Eng. Trans.) 37, 2035 (1967); Zh. Obshch. Khim. 37, 2145 (1967).

Mishchenko, K. P., and Stagis, A. Ya., Zh. Obschei. Khim. 40, 2537 (1970); J. Gen. Chem. USSR (Eng. Trans.) 40, 2527 (1970).

Mishchenko, K. P., and Yakovlev, I. F., J. Gen. Chem. USSR (Eng. Trans.) 29, 1735 (1959); Zh. Obshch. Khim. 29, 1761 (1959).

Mita, K., and Okubo, T., J. Chem. Soc. Faraday Trans. I 70, 1546 (1974).

Mita, K., Okubo, T., and Ise, N., J. Chem. Soc. Faraday Trans. I 71, 1932 (1975).

Mita, K., Obubo, T., and Ise, N., J. Chem. Soc. Faraday Trans. I 72, 504 (1976).

Mitchell, R. E., and Cobble, J. W., J. Am. Chem. Soc. 86, 5401 (1964).

Mohanty, R. K., and Ahluwalia, J. C., J. Chem. Thermodynm. 4, 53 (1972).

Mohanty, R. K., Sarma, T. S., Subramanian, S., and Ahluwalia, J. C., Trans. Faraday Soc. 67, 305 (1971).

Mohanty, R. K. Sunder, S., and Ahluwalia, J. C., J. Phys. Chem. 76, 2577 (1972).

Moles, E., and Vitoria, A. P., Anales Real. Soc. Espan. Fis. Quim. 30, 99 (1932).

Monaenkova, A. S., Kon'kova, T. S., Mishchenko, A. V., and Vorob'ev, A. F., J. Gen. Chem. USSR (Eng. Trans.) 42, 2608 (1972); Zh. Obshch. Khim. 42, 2615 (1972).

Mondain-Monval, P., C. R. Hebd. Seances. Acad. Sci. 176, 301 (1923 b).

Mondain-Monval, P., C. R. Hebd. Seances. Acad. Sci. 176, 889 (1923 a).

Mondain-Monval, P., Ann. Chim. (Paris) 3, 72 (1925).

Morgen, R. A., Ind. Eng. Chem. 34, 571 (1942).

Morss, L. R., and McCue, M. C., J. Chem. Eng. Data 21, 337 (1976).

Mulert, O., Z. Anorg. Allg. Chem. 75, 198 (1912).

Muller, J. A., Bull. Soc. Chim. France 13, 1053 (1913).

Muller, J. A., Bull. Soc. Chim. France 23, 13 (1918).

Murata, Nippon Kagaku Kaishi (1921-47) 53, 574 (1932).

Musbally, G. M., Perron, G., and Desnoyers, J. E., J. Colloid Inter. Sci. 54, 80 (1976).

Mussini, T., and Pagella, A., J. Chem. Eng. Data 16, 49 (1971).

Myasnikova, V. F., Drakin, S. I., and Karepet'yants, M. Kh., Zh. Fiz. Khim. 43, 2141 (1969); Russ. J. Phys. Chem. (Eng. Trans.) 43, 1201 (1969).

Myasnikova, V. F., Drakin, S. I., Karepet'yants, M. Kh., and Lantukhova, L. V., Zh. Fiz. Khim. 42, 2055 (1968); Russ. J. Phys. Chem. (Eng. Trans.) 42, 1080 (1968).

Nathan, C. C., Wallace, W. E., and Robinson, A. L., J. Am. Chem. Soc. 65, 790 (1943).

Naudé, S. M., Z. Elektrochem. 33, 532 (1927).

Naudé, S. M., Z. Physik. Chem. (Leipzig) 135, 209 (1928).

Neiman, M. B., Zh. Obshch. Khim. 2, 1 (1932).

Nernst, W., and Orthmann, W., Sitzungsber. Preuss. Akad. Wiss. Phys. Math. Kl. 51 (1926).

Nernst, W., and Orthmann, W., Sitzungsber. Preuss. Akad. Wiss. Phys. Math. Kl. 136 (1927).

Nernst, W., and Orthmann, W., Z. Phys. Chem. (Leipzig) 135, 199 (1928).

Neumann, M. B., Z. Phys. Chem. (Leipzig) A158, 258 (1932).

Newman, E. S., J. Res. Nat. Bur. Stand. Sect. A 54, 347 (1955).

Nikolaeva, V. I., Kogan, A. G., and Ogorodnikov, G. F., Izvest. Akad. Nauk. SSSR Ser. Khim. 193 (1936).

Nosova, T. A., Russ. J. Inorg. Chem. (Eng. Trans.) 11, 1051 (1966); Zh. Neorg. Khim. 11, 1970 (1966).

Novikov, S. N., and Vasil'ev, V. A., Zh. Fiz. Khim. 49, 2587 (1975); Russ. J. Phys. Chem. (Eng. Trans.) 49, 1517 (1975).

Novoselov, N. P., and Mishchenko, K. P., J. Gen. Chem. USSR (Eng. Trans.) 38, 2065 (1968); Zh. Obshch. Khim. 38, 2129 (1968).

Novoselov, N. P., and Mishchenko, K. P., J. Gen. Chem. USSR (Eng. Trans.) 41, 250 (1971); Zh. Obshch. Khim. 41, 255 (1971 a).

Novoselov, N. P., and Mishchenko, K. P., J. Gen. Chem. USSR (Eng. Trans.) 41, 485 (1971); Zh. Obshch. Khim. 41, 489 (1971 b).

Novoselov, N. P., and Mishchenko, V. P., Zh. Fiz. Khim. 45, 1254 (1971); Russ. J. Phys. Chem. (Eng. Trans.) 45, 709 (1971 c).

Nuttall, R. L., Churney, K. L., and Kilday, M. V., J. Res. Nat. Bur. Stand. (U.S.) 83, 335 (1978).

Olofsson, G., and Hepler, L. G., J. Solution Chem. 4, 127 (1975).

Olofsson, G., and Olofsson, I., J. Chem. Thermodyn. 5, 533 (1973).

Olofsson, G., Spitzer, J. J., and Hepler, L. G., Can. J. Chem. 56, 1871 (1978).

Olynyk, P., and Gordon, A. R., J. Am. Chem. Soc. 65, 224 (1943).

Pagliani, S., Acad. Sci. Torino. Class. Sci. Fis. Mat. Nat. Atti., 16, 595 (1880).

Paoletti, P., Usenza, R., and Vacca, A., Ric. Sci. 8, 201 (1965).

Parker, V. B., Thermal Properties of Aqueous Uni-univalent Electrolytes, NSRDS NBS2, U.S. Government Printing Office, (1965).

Parshikov, I. A., Zh. Prikl. Khim. (Leningrad) 34, 2649 (1961).

Partington, J. R., and Soper, W. E., Philos. Mag. 7, 209 (1929).

Pascal, P., and Garnier, M., Bull. Soc. Chim. France 27, 8 (1920).

Patterson, A., Jr., and Felsing, W. A., J. Am. Chem. Soc. 60, 2693 (1938).

Payn, R. C., and Perman, E. P., Trans. Faraday Soc. 25, 599 (1929).

Pennington, W., Refrig. Eng. 63, 57 (1955).

Perman, E. P., and Lovett, T., Trans. Faraday Soc. 22, 8 (1926).

Perreu, J., C. R. Hebd. Seances Acad. Sci. 189, 167 (1929 a).

Perreu, J., C. R. Hebd. Seances Acad. Sci. 189, 285 (1929 b).

Perreu, J., C. R. Hebd. Seances Acad. Sci. 189, 462 (1929 c).

Perreu, J., C. R. Hebd. Seances Acad. Sci. 190, 429 (1930).

Perreu, J., C. R. Hebd. Seances Acad. Sci. 198, 1410 (1934 a).

Perreu. J., C. R. Hebd. Seances Acad. Sci. 198, 1767 (1934 b).

Perreu, J., C. R. Hebd. Seances Acad. Sci. 200, 237 (1935 a).

Perreu, J., C. R. Hebd. Seances Acad. Sci. 200, 1588 (1935 b).

Perreu, J., C. R. Hebd. Seances Acad. Sci. 211, 182 (1940 b).

Perreu, J., C. R. Hebd. Seances Acad. Sci. 211, 256 (1940 a).

Perreu, J., C. R. Hebd. Seances Acad. Sci. 212, 442 (1941 a).

Perreu, J., C. R. Hebd. Seances Acad. Sci. 212, 701 (1941 b).

Perreu, J., C. R. Hebd. Seances Acad. Sci. 198, 1767 (1943).

Perron, G., and Desnoyers, J. E., J. Solution Chem. 1, 537 (1972).

Perron, G., Desnoyers, J. E., and and Millero, F. J., Can. J. Chem. 52, 3738 (1974).

Perron, G., Desnoyers, J. E., Millero, F. J., Can. J. Chem. 53, 1134 (1975).

Perron, G., Desrosiers, N., and Desnoyers, J. E., Can. J. Chem. 54, 2163 (1976).

Perron, G., Fortier, J.-L., and Desnoyers, J. E., J. Chem. Thermodyn. 7, 1177 (1975).

Person, C. C., Ann. Chim. Phys. [3] 33, 437 (1851).

Petersen, E., Z. Phys. Chem. (Leipzig) 11, 174 (1893).

Pettersson, O., J. Prakt. Chem. 24, 293 (1881).

Philip, R. R., and Desnoyers, J. E., J. Solution Chem. 1, 353 (1972).

Philip, P. R., Perron, G., and Desnoyers, J. E., Can. J. Chem. 52, 1709 (1974).

Picker, P., Leduc, P.-A., Philip, P. R., and Desnoyers, J. E., J. Chem. Thermodyn. 3, 631 (1971).

Pickering, S. U., J. Chem. Soc. 51, 291 (1887).

Pickering, S. U., Proc. Roy. Soc. London 49, 11 (1891).

Pilcher, G., Jones, M. N., Espada, L., and Skinner, H. A., J. Chem. Thermodyn. 1, 381 (1969).

Ping-Lu, L., Schäfer, K., Schuller, D., and Stiern, M., Chem. Ing. Techn. 42, 1195 (1970).

Pitzer, K. S., J. Am. Chem. Soc. 59, 2365 (1937).

Pitzer, K. S., Peterson, J. R., and Silvester, L. F., J. Solution Chem. 7, 45 (1978).

Pitzer, K. S., and Silvester, L. F., J. Phys. Chem. 82, 1239 (1978).

Plake, E., Z. Phys. Chem. (Leipzig) A162, 257 (1932).

Poczopko, S., and Mecik, M., Rocz. Chem. 45, 1947 (1971).

Poczopko, S., and Orzeszko, W., Rocz. Chem. 46, 259 (1972).

Poczopko, S., and Orzeszko, W., Rocz. Chem. 47, 789 (1973).

Podgornaya, E. A., Trudy Leningrad Tekhnol. Inst. Lensoveta. No. 61, 43 (1960).

Popoff, M. M., Bundel, A., and Choller, W., Z. Phys. Chem. (Leipzig) A147, 302 (1930).

Popoff, M. M., Chomajakoff, K. G., Feodossjeff, N. N., and Schirokich, P. K., Z. Phys. Chem. (Leipzig) A167, 29 (1933).

Popoff, M. M., Skuratoff, S. M., and Feodossjeff, N. N., Z. Phys. Chem. (Leipzig) A167, 42 (1933).

Ponov, M. M., Skuratov, S. M., and Strel'tsova, M. M., Zh. Obshch. Khim. 10, 2023 (1940).

Porter, A. W., Trans. Faraday Soc. 13, 373 (1918).

Pranschke, A., and Schwiete, H. E., Z. Anorg. Allg. Chem. 223, 225 (1935).

Prasad, K. P., and Ahluwalia, J. C., J. Solution Chem. 5, 491 (1976).

Pratt, F. R., J. Franklin Inst. 185, 663 (1918).

Prétat, Mem. Poudres 24, 119 (1930).

Puchkov, L. V., Baranova, T. A., and Lapidus, M. E., J. Appl. Chem. USSR (Eng. Trans.) 43, 463 (1970); Zh. Prikl. Khim. (Leningrad) 43, 455 (1970).

Puchkov, L. V., and Kurochkina, V. V., J. Appl. Chem. USSR (Eng. Trans.) 43, 175 (1970); Zh. Prikl. Khim. (Leningrad) 43, 181 (1970).

Puchkov, L. V., Matveeva, R. D., and Baranova, T. L., J. Appl. Chem. USSR (Eng. Trans.) 46, 460 (1973); Zh. Prikl. Khim. (Leningrad) 46, 443 (1973).

Puchkov, L. V., Styazhkin, P. S., and Fedorov, M. K., J. Appl. Chem. USSR (Eng. Trans.) 49, 1268 (1976); Zh. Prikl. Khim. (Leningrad) 49, 1232 (1976).

Pupezin, J. D., Jakli, G., Jancso, G., and Van Hook, W. A., J. Phys. Chem. 76, 743 (1972).

Quadrifoglio, E., Crescenzi, V., Cesaro, A., and Delben, F., J. Phys. Chem. 75, 3633 (1971).

Quinton, M., C. R. Hebd. Seances Acad. Sci. 196, 538 (1933).

Quintin, M., C. R. Hebd. Seances Acad. Sci. 198, 1856 (1934).

Quintin, M., C. R. Hebd. Seances Acad. Sci. 200, 1579 (1935 a).

Quintin, M., C. R. Hebd. Seances Acad. Sci. 201, 549 (1935 b).

Quintin, M., J. Chim. Phys. Phys. Chim. Biol. 33, 111 (1936).

Quintin, M., and Lebettre, M. A., C. R. Heb'd. Seances Acad. Sci. 198, 1140 (1934).

Radulescu, D., and Jula, O., Z. Phys. Chem. (Leipzig) B26, 390 (1934).

Ramstetter, H., and Hantke, G., Z. Phys. Chem. (Leipzig) Bodenstein-Festband, 662 (1931).

Randall, M., and Bisson, C. S., J. Am. Chem. Soc. 42, 347 (1920).

Randall, M., and Ramage, W. D., J. Am. Chem. Soc. 49, 93 (1927).

Randall, M., and Rossini, F. D., J. Am. Chem. Soc. 51, 323 (1929).

Randall, M., and Taylor, M. D., J. Phys. Chem. 45, 959 (1941).

Rant, Z., Forsch. Geb. Ingenieurwes. 20B, 77 (1954).

Ray, R. C., Proc. Roy. Soc. London A101, 509 (1922).

Readnour, J. M., and Cobble, J. W., Inorg. Chem. 8, 2174 (1969).

Reicher, L. Th., and Van Deventer, Ch. M., Z. Phys. Chem. (Leipzig) 5, 559 (1890).

Rhodes, F. H., and Nelson, C. C., Ind. Eng. Chem. 30, 648 (1938).

Richards, T. W., and Dole, M., J. Am. Chem. Soc. 51, 794 (1929).

Richards, T. W., and Gucker, F. T., Jr., J. Am. Chem. Soc. 47, 1876 (1925).

Richards, T. W., and Gucker, F. T., J. Am. Chem. Soc. 51, 712 (1929).

Richards, T. W., and Hall, L. P., J. Am. Chem. Soc. 51, 707 (1929 a).

Richards, T. W., and Hall, L. P., J. Am. Chem. Soc. 51, 731 (1929 b).

Richards, T. W., and Mair, B. J., J. Am. Chem. Soc. 51, 740 (1929).

Richards, T. W., Mair, B. J., and Hall, L. P., J. Am. Chem. Soc. 51, 727 (1929).

Richards, T. W., and Rowe, A. W., Proc. Am. Acad. Arts Sci. 43, 475 (1908 a).

Richards, T. W., and Rowe, A. W., Z. Phys. Chem. (Leipzig) 64, 187 (1908 b).

Richards, T. W., and Rowe, A. W., Proc. Am. Acad. Arts Sci. 49, 173 (1913 a).

Richards, T. W., and Rowe, A. W., Z. Phys. Chem. (Leipzig) 84, 585 (1913 b).

Richards, T. W., and Rowe, A. W., J. Am. Chem. Soc. 42, 1621 (1920).

Richards, T. W., and Rowe, A. W., J. Am. Chem. Soc. 43, 770 (1921).

Richards, T. W., Rowe, A. W., and Burgess, L. L., J. Am. Chem. Soc. 32, 1176 (1910).

Richards, T. W., and Thorvaldson, T., J. Am. Chem. Soc. 44, 1051 (1922).

Robinson, A. L., J. Am. Chem. Soc. 54, 1311 (1932).

Robinson, A. L., and Frank, H. S., J. Am. Chem. Soc. 56, 2312 (1934).

Robinson, A. L., and Wallace, W. E., J. Am. Chem. Soc. 63, 1582 (1941).

Robinson, A. L., and Wallace, W. E., Chem. Rev. 30, 195 (1942).

Robinson, R. A., Trans. Faraday Soc. 35, 1222 (1939).

Robinson, R. A., and Stokes, R. H., Trans. Faraday Soc. 36, 740 (1940).

Roozeboom, H. W. B., Rec. Trav. Chim. 5, 323 (1886).

Rossini, F. D., J. Res. Nat. Bur. Stand. 6, 791 (1931 a).

Rossini, F. D., J. Res. Nat. Bur. Stand. 7, 47 (1931 b).

Roth, W. A., Z. Elektrochem. 50, 107 (1944).

Roth, W. A., and Becker, G., Landolt-Börnstein Physikalisch-Chemische Tabellen, Auf. 5, Erg. 2 p. 1545 (1931).

Roth, W. A., and Becker, G., Z. Phys. Chem. (Leipzig) A159, 27 (1932).

Roth, W. A., and Bertram, A., Z. Elektrochem. 43, 376 (1937).

Roth, W. A., and Chall, P., Z. Elektrochem. 34, 185 (1928).

Roth, W. A., and Eymann, C., Z. Phys. Chem. (Leipzig) A143, 321 (1929).

Roth, W. A., and Flügge, R., Landolt-Börnstein Physikalisch-Chemische Tabellen, Auf. 5, Erg. 2 p. 1190 (1931).

Roth, W. A., and Meichsner, A., Landolt-Börnstein Physikalisch-Chemische Tabellen, Auf. 5, Erg 2 p. 1550 (1931).

Roth, W. A., Pahlke, H., and Bertram, A., Landolt-Börnstein Physikalisch-Chemische Tabellen, Auf. 5, Erg. 3 p. 2813 (1933).

Roth, W. A. Pahlke, H., Bertram, A., and Börger, E., Z. Elektrochem. 43, 350 (1937).

Roth, W. A., and Schwartz, O., Ber. Dtsch. Chem. Ges. 61, 1539 (1928).

Roth, W. A., Umbach, H., and Chall, P., Arch. Eisenhüttenwes. 4, 89 (1930).

Roth, W. A., and Wienert, F., Arch. Eisenhüttenwes. 7, 455 (1934).

Roth, W. A., Wirths, G., and Berendt, H., Z. Elektrochem. 48, 264 (1942).

Roth, W. A., and Zeumer, H., Z. Elektrochem. 38, 164, 248 (1932).

Roux, A., Musbally, G. M., Perron, G., Desnoyers, J. E., Singh, P. P., Woolley, E. M., and Hepler, L. G., Can. J. Chem. 56, 24 (1978).

Rozenfel'd, L. M., and Karnaukh, M. S., Zh. Tekh. Fiz. 28, 655 (1958); Sov. Phys.-Tech. Phys. (Eng. Trans.) 28, 614 (1958).

Rümelin, G., Z. Phys. Chem. (Leipzig) 58, 449 (1907).

Rüterjans, H., Schreiner, F., Sage, U., and Ackermann, Th., J. Phys. Chem. 73, 986 (1969).

Rutskov, A. P., Sbornik. Rabot. 8, 85 (1946).

Rutskov, A. P., Zh. Priklad. Khim. (Leningrad) 21, 820 (1948).

Sabatier, P., C. R. Hebd. Seances Acad. Sci. 89, 234 (1879).

Sabatier, P., Ann. Chim. Phys. 22, 5 (1881 a).

Sabatier, P., C. R. Hebd. Seances Acad. Sci. 93, 56 (1881 b).

Salman, B. C. L., and White, A. G., J. Chem. Soc. 3197 (1957).

Sandonnini, C., Atti. Acad. Lincei. 4, 63 (1926).

Sandonnini, C., and Gerosa, G., Gazz. Chim. Ital. 55, 916 (1925).

Sarma, T. S., and Ahluwalia, J. C., Trans. Faraday Soc. 67, 2528 (1971).

Sarma, T. S., Mohanty, R. K., and Ahluwalia, J. C., Trans. Faraday Soc. 65, 2333 (1969).

Savchenko, N. I., Akhumov, E. I., and Zhilina, L. P., Zh. Prikl. Khim. (Leningrad) 43, 1844 (1970); J. Appl. Chem. USSR (Eng. Trans.) 43, 1859 (1970).

Schäfer, H., Wittig, F. E., and Jori, M., Z. Anorg. Allg. Chem. 287 61 (1956).

Schäfer, H., and Kahlenberg, F., Z. Anorg. Allg. Chem. 294, 242 (1958).

Schäfer, H., and Kahlenberg, F., Z. Anorg. Allg. Chem. 305, 291 (1960).

Schäfer, H., Wittig, F. E., and Jori, M., Z. Anorg. Allg. Chem. 287, 61 (1956).

Schlesinger, H., Phys. Z. 10, 210 (1909).

Scholle, S., Szmigielska, M., and Dlabac, B., Chem. Prumsyl Prague 15, 557 (1965).

Scholle, S., and Brunclikova, Z., Chem. Prusyl Prague 18, 533 (1968).

Scholz, R., Ann. Phys. (Leipzig) 45, 193 (1892).

Schulze, W., Z. Elektrochem. 58, 165 (1954).

Schwartz, E., and Coblans, H., Z. Phys. Chem. (Leipzig) A176, 430 (1936).

Selivanova, N. M., Kapustinskii, A. F., and Zubova, G. A., Bull. Acad. Sci. USSR. Div. Chem. Sci., 174 (1959); Izv. Akad. Nauk SSSR, Ser. Khim., 187 (1959).

Selivanova, N. M., and Pakhorukov, N. I., Izv. Vyssh. Ucheb. Zaved. Khim. Khim. Tekhnol. 4, 355 (1961).

Selivanova, N. M., Zubova, G. A., and Finkelstein, E. I., Zh. Fiz. Khim. 33, 2365 (1959).

Sergeeva, R. I., Drakin, S. I., and Karapet'yants, M. Kh., Russ. J. Phys. Chem. (Eng. Trans.) 44, 1483 (1970 a).

Sergeeva, R. I., Drakin, S. I., and Karapet'yants, M. Kh., Zh. Fiz. Khim. 44, 2922 (1970); Russ. J. Phys. Chem. (Eng. Trans.) 44, 1665 (1970 b).

Serowy, F., and Soika, G., Wiss. Z. Tech. Hochsh. Chem. Lenna-Merseburg 6, 343 (1964).

Shchukarev, S. A., Andreev, S. N., and Borisova, Z. U., J. Gen. Chem. USSR (Eng. Trans.) 29, 2430 (1959); Zh. Obshch. Khim. 29, 2468 (1959).

Shchukarev, S. A., Borisova, Z. U., and Orlova, G. M., Zh. Obshch. Khim. 30, 1053 (1960); J. Gen. Chem. USSR (Eng. Trans.) 30, 1069 (1960).

Shchukarev, S. A., Orlova, G. M., and Borisova, Z. U., Zh. Obshch. Khim. 30, 2097 (1960); J. Gen. Chem. USSR (Eng. Trans.) 30, 2073 (1960).

Shibata, F. L. E., and Murata, F., Nippon Kaguku Kaishi (1921-47) 52, 639 (1931).

Shibata, F. L. E., and Murata, F., J. Sci. Hiroshima Univ. Ser. A-2 7, 335 (1937).

Shibata, F., Murata, F., and Toyoda, K., Nippon Kagaku Kaishi (1921-47), 52, 639 (1931).

Shibata, Z., and Niwa, K., Z. Phys. Chem. (Leipzig) 173, 415 (1935).

Shibata, F. L. E., Oda, S., and Furukawa, S., J. Sci. Hiroshima Univ. Ser. A-2 3, 55 (1930 b).

Shibata, F. L. E., Oda, S., and Furukawa, S., Nippon Kagaku Kaishi (1921-47), 51, 289 (1930 a).

Shibata, F. L. E., Oda, S., and Furukawa, S., J. Sci. Hiroshima Univ. Ser. A-2 3, 227 (1933).

Shields, C. T., Refrig. Eng. 59, 880 (1951).

Shin, C., Worley, I., and Criss, C. M., J. Solution Chem. 5, 867 (1976).

Shmagin, L. F., and Shidlovskii, A. A., Zh. Fiz. Khim. 45, 561 (1971); Russ. J. Phys. Chem. (Eng. Trans.) 45, 310 (1971).

Shmagin, L. F., and Shidlovskii, A. A., Zh. Fiz. Khim. 45, 1304 (1971).

Shpakova, S. G., Drakin, S. I., and Karapet'yants, M. Kh., Tr. Mosk. Khim. Tekhnol. Inst. 75, 3 (1973).

Shrawder, J., Jr., and Cowperthwaite, I. A., J. Am. Chem. Soc. 56, 2340 (1934).

Sidorova, S. N., Puchkov, L. V., and Fedorov, M. K., J. Appl. Chem. USSR (Eng. Trans.) 48, 255 (1975); Zh. Prikl. Khim. (Leningrad) 48, 253 (1975).

Silvester, L. F., and Pitzer, K. S., J. Phys. Chem. 81, 1822 (1977).

Silvester, L. F., and Pitzer, K. S., J. Solution Chem. 7, 327 (1978).

Singh, P. P., McCurdy, K. G., Woolley, E. M., and Hepler, L. G., J. Solution Chem. 6, 327 (1977).

Singh, P. P., Spitzer, J., McKay, R. M., McCurdy, K. G., and Hepler, L. G., Thermochim. Acta 24, 111 (1978).

Singh, P. P., Woolley, E. M., McCurdy, K. G., and Hepler, L. G., Can. J. Chem. 54, 3315 (1976).

Skerjanc, J., Dolar, D., and Leskovsek, D., Z. Phys. Chem. (Frankfurt am Maim) 56, 207 (1967 a).

Skerjanc, J., Dolar, D., and Leskovsek, D., Z. Phys. Chem. (Frankfurt Am Maim) 56, 218 (1967 b).

Skerjanc, J., Dolar, D., and Leskovsek, Z. Phys. Chem. (Frankfurt am Maim) 70, 31 (1970).

Smirnova, E. P., Matveichuk, N. L., Mikhailin, A. D., and Illarionov, V. V., Dokl. Akad. Nauk SSSR 189, 443 (1969).

Smisko, J., and Mason, L. S., J. Am. Chem. Soc. 72, 3679 (1950).

Smith, G. McP., Stearn, A. E., and Schneider, R. F., J. Am. Chem. Soc. 42, 32 (1920).

Snipes, H. P., Manly, C., and Ensor, D. D., J. Chem. Eng. Data 20, 287 (1975).

Socolik, A., Zh. Obshch. Khim. 2, 311 (1932).

Socolik, A. S., Z. Ang. Chem. 158, 305 (1932).

Soldano, C. S., and Patterson, B. A., J. Chem. Soc., 937 (1962).

Sorina, G. A., Kozlovskaya, G. M., Tsekhanskaya, Yu. V., Bezlyudova, L. I., and Shmakov, N. G., Russ. J. Phys. Chem. (Eng. Trans.) 51, 1226 (1977); Zh. Fiz. Khim. 51, 2099 (1977).

Spedding, F. H., Baker, J. L., and Walters, J. P., J. Chem. Eng. Data 20, 189 (1975).

Spedding, F. H., Csejka, D. A., and DeKock, C. W., J. Phys. Chem. 70, 2423 (1966).

Spedding, F. H., DeKock, C. W., Pepple, G. W., and Habenschuss, A., J. Chem. Eng. Data 22, 58 (1977).

Spedding, F. H., Derer, J. L., Mohs, M. A., and Rard, J. A., J. Chem. Eng. Data 21, 474 (1976).

Spedding, F. H., and Flynn, J. P., J. Am. Chem. Soc. 76, 1477 (1954).

Spedding, F. H., and Jones, K. C., J. Phys. Chem. 70, 2450 (1966).

Spedding, F. H., and Miller, C. F., J. Am. Chem. Soc. 74, 3158 (1952 a).

Spedding, F. H., and Miller, C. F., J. Am. Chem. Soc. 74, 4195 (1952 b).

Spedding, F. H., Mohs, M. A., Derer, J. L., and Habenschuss, A., J. Chem. Eng. Data 22, 142 (1977).

Spedding, F. H., Naumann, M. A., and Eberts, R. E., J. Am. Chem. Soc. 81, 23 (1959).

Spedding, F. H., Walters, J. P., and Baker, J. L., J. Chem. Eng. Data 20, 438 (1975).

Spink, C. H., and Wadsö, I., J. Chem. Thermodyn. 7, 561 (1975).

Spitzer, J. J., Singh, P. P., McCurdy, K. G., and Hepler, L. G., J. Solution Chem. 7, 81 (1978).

Spitzer, J. J., Singh, P. P., Olofsson, I. V., and Hepler, L. G., J. Solution Chem. 7, 623 (1978).

Stahlberg, A., Ofvers. Fin. Vetensk-Soc. Föer. 57, 1 (1914).

Stakhanova, M. S., Epikhin, Yu. A., and Karapet'yants, M. Kh., Russ. J. Phys. Chem. (Eng. Trans.) 37, 1389 (1963); Zh. Fiz. Khim. 37, 2570 (1963).

Stakhanova, M. S., Karapet'yants, M. Kh., Vasil'ev, V. A., and Epikhin, Yu. A., Russ. J. Phys. Chem. (Eng. Trans.) 38, 1306 (1964); Zh. Fiz. Khim. 38, 2420 (1964).

Stakhanova, M. S., and Vasil'ev, V. A., Izvest. Vysshikh. Ucheb. Zaved. Khim. Khim. Tekhnol. 3, 829 (1960).

Stakhanova, M. S., and Vasil'ev, V. A., Zh. Fiz. Khim. 37, 1568 (1963); Russ. J. Phys. Chem. (Eng. Trans.) 37, 839 (1963).

Stakhanova, M. S., Vlasenko, K. K., Karapet'yants, M. Kh., and Bazlova, I. V., Zh. Fiz. Khim. 42, 518 (1968); Russ. J. Phys. Chem. (Eng. Trans.) 42, 274 (1968).

Staveley, L. A. K., Markham, D. R., and Jones, M. R., J. Inorg. Nucl. Chem. 30, 231 (1968).

Stearn, A. E., and Smith, G. McP., J. Am. Chem. Soc. 42, 18 (1920).

Stern, J. H., Parker, R., Peak, L. S., and Volland, W. V., J. Chem. Eng. Data 8, 40 (1963).

Stern, J. H., and Passchier, A. A., J. Phys. Chem. 66, 752 (1962).

Stern, J. H., Yavuz, O., and Swearingen, T., J. Chem. Eng. Data 17, 183 (1972).

Stokes, R. H., and Stokes, J. M., Trans. Faraday Soc. 41, 688 (1945).

Streeck, H., Z. Phys. Chem. (Leipzig) A169, 103 (1934).

Stubblefield, C. B., and Bach, R. O., J. Chem. Ehg. Data 17, 491 (1972).

Sturtevant, J. M., J. Am. Chem. Soc. 62, 584, 3265 (1940 a).

Sturtevant, J. M., J. Am. Chem. Soc. 62, 1879 (1940 c).

Sturtevant, J. M., J. Am. Chem. Soc. 62, 2276 (1940 b).

Sturtevant, J. M., J. Am. Chem. Soc. 64, 762 (1942).

Sturtevant, J. M., J. Phys. Chem. 79, 2737 (1975).

Subramanian, S., and Ahluwalia, J. C., J. Phys. Chem. 72, 2525 (1968).

Sunder, S., Chawla, B., and Ahluwalia, J. C., J. Phys. Chem. 78, 738 (1974).

Swallow, J. C., and Alty, S., J. Chem. Soc. 3062 (1931).

Sweeton, F. H., Mesmer, R. E., and Baes, C. F., Jr., J. Solution Chem. 3, 191 (1974).

Tamaki, K., Isomura, Y., and Ohara, Y., Bull. Chem. Soc. Japan 45, 2939 (1972).

Tamaki, K., Yoshikawa, S., and Kushida, M., Bull. Chem. Soc. Japan 48, 3018 (1975).

Tanner, J. E., and Lamb, F. W., J. Solution Chem. 7, 303 (1978).

Taylor, C. E., J. Phys. Chem. 59, 653 (1955).

Terasaki, Y., Nippon Kagaku Kaishi (1921-47), 78, 1774 (1957).

Thibaut, R., Z. Elektrochem. 19, 881 (1913).

Thomsen, J. Prakt. Chem. 17, 165 (1878).

Thomsen, J., Thermochemische Untersuchungen - Band I, J. A. Barth Verlag, Leipzig, 1883 (a).

Thomsen, J., Thermochemische Untersuchungen - Band III, J. A. Barth Verlag, Leipzig, 1883 (b).

Thompson, P. T., Smith, D. E., and Wood, R. H., J. Chem. Eng. Data 19, 386 (1974).

Thorvaldson, T., and Bailey, E. C., Can. J. Res. 24B, 51 (1946).

Thorvaldson, T., Brown, W. G., and Peaker, C. R., J. Am. Chem. Soc. 52, 3927 (1930).

Tippetts, E. A., and Newton, R. F., J. Am. Chem. Soc. 56, 1675 (1934).

Tollinger, J., Sitz. Akad. Wiss. Wien, Kl. Math. Nat. 72, 535 (1875).

Towns, M. B., Greeley, R. S., and Lietzke, M. H., J. Phys. Chem. 64, 1861 (1960).

Truesdell, A. H., Science 161, 884 (1968).

Tucker, T. S., and Callendar, H. L., Trans. Roy. Soc. London A215, 319 (1915).

Tuech, J., and Combet, S., J. Chim. Phys. Phys.-Chim. Biol. 73, 856 (1976).

Ueda, Y., Sci. Rep. Tohoku Univ. Ser. I 22, 448 (1933 a).

Ueda, Y., Sci. Rep. Tohoku Univ. Ser. I 22, 879 (1933 b).

Urban, F., J. Phys. Chem. 36, 1108 (1932).

Vaillant, P., C. R. Hebd. Seances Acad. Sci. 141, 658 (1905).

Vanderzee, C. E., and Gier, L. J., J. Chem. Thermodyn. 6, 441 (1974).

Vanderzee, C. E., and King, D. L., J. Chem. Thermodyn., in press.

Vanderzee, C. E., and Myers, R. A., J. Phys. Chem. 65, 153 (1961).

Vanderzee, C. E., and Nutter, J. D., J. Chem. Eng. Data 19, 268 (1974).

Vanderzee, C. E., Nutter, J. D., Rodenburg, W. W., Rodenburg, M. L. N., and King, D. L., J. Chem. Eng. Data 19, 320 (1974).

Vanderzee, C. E., and Swanson, J. A., J. Phys. Chem. 67, 285 (1963 a).

Vanderzee, C. E., and Swanson, J. A., J. Phys. Chem. 67, 2608 (1963 b).

Vanderzee, C. E., and Swanson, J. A., J. Chem. Eng. Data 17, 488 (1972).

Van Deventer, C. M., and Van destadt, H. J., Maandlblat Natuurwetenschappen 17, 1 (1891).

Van Deventer, C. M., and Van destadt, H. J., Z. Phys. Chem. (Leipzig) 9, 43 (1892).

Van't Hoff, J. H., Kenrick, F. B., and Dawson, H. M., Z. Phys. Chem. (Leipzig) 39, 57 (1902).

Van Nuys, C. C., Trans. Am. Inst. Chem. Eng. 39, 663 (1943).

Varasova, E. N., Mishchenko, K. P., and Frost, O. I., Zh. Obshch. Khim. 7, 1284 (1937).

Vasil'ev, V. A., and Burlai, T. F., Izv. Vyssh Ucheb. Zaved. Khim. Khim. Tekhnol. 20, 216 (1977).

Vasil'ev, V. A., Fedyainov, N. V., Karapet'yants, M. Kh., and Karpachev, A. I., Izv. Vyssh. Ucheb. Zaved. Khim. Khim. Tekhnol. 16, 689 (1973).

Vasil'ev, V. A., Fedyainov, N. V., Karapet'yants, M. Kh., and Serafimova, T. I., Zh. Fiz. Khim. 45, 1867 (1971); Russ. J. Phys. Chem. (Eng. Trans.) 45, 1066 (1971).

Vasil'ev, V. A., Fedyainov, N. V., and Kurenkov, V. V., Russ J. Phys. Chem. (Eng. Trans.) 47, 1570 (1973).

Vasil'ev, V. A., Karapet'yants, M. Kh., Sanaev, E. S., and Novikov, S. N., Russ. J. Phys. Chem. (Eng. Trans.) 48, 1398 (1974).

Vasil'ev, V. A., Novikov, S. N., and Karapet'yants, M. Kh., Zh. Fiz. Khim. 49, 1936 (1975); Russ. J. Phys. Chem. (Eng. Trans.) 49, 1137 (1975).

Vasil'ev, V. A., Novikov, S. N., and Karapet'yants, M. Kh., Izv. Vyssh. Ucheb. Zaved. Khim. Khim. Tekhnol. 20, 1405 (1977).

Vasil'ev, V. A., Sanaev, E. S., and Karapet'yants, M. Kh., Tr. Mosk. Khim. Tekhnol. Inst. 75, 13 (1973).

Vasil'ev, V. A., and Shevchenko, E. Ya., Izv. Vyssh. Ucheb. Zaved. Khim. Khim. Tekhnol. 13, 789 (1970).

Vasil'ev, V. A., and Shevchenko, E. Ya., Tr. Mosk. Khim. Tekhnol. Inst. 71, 48 (1972).

Vasil'ev, V. A., Shevchenko, E. Ya., Fedyainov, N. V., and Golikov, M. V., Izv. Vyssh. Uchebn. Zaved. Khim. Khim. Tekhnol. 20, 1557 (1977).

Vasil'ev, V. P., Kochergina, L. A., and Orlova, T. D., J. Gen. Chem. USSR (Eng. Trans.) 46, 2109 (1976); Zh. Obshch. Khim. 46, 2192 (1976).

Vasil'ev, V. P., and Kozlovskii, E. V., Russ. J. Inorg. Chem. (Eng. Trans.) 19, 147 (1974); Zh. Neorg. Khim. 19, 267 (1974).

Vasil'ev, V. P., and Vorob'ev, P. N., Russ. J. Phys. Chem. (Eng. Trans.) 43, 1605 (1969); Zh. Fiz. Khim. 43, 2859 (1969).

Vaslow, F., J. Phys. Chem. 75, 3317 (1971).

Verrall, R. E., and Dickson, L. W., J. Solution Chem. 5, 203 (1976).

Vichutinskii, A. A., and Golikov, A. G., Dokl. Akad. Nauk. SSSR 238, 127 (1978).

Von Herrmann, C., Ind. Eng. Chem. 33, 898 (1941).

Von Meyeren, Z. Phys. Chem. (Leipzig) A160, 272 (1932).

Von Reiss, M. A., Ann. Phys. (Leipzig) 10, 291 (1880).

Von Stackelberg, E., Z. Phys. Chem. (Leipzig) 26, 533 (1898).

Von Steinwehr, H., Z. Phys. Chem. (Leipzig) 38, 185 (1901).

Von Wartenberg, H., and Lerner-Steinberg, B., Z. Physik. Chem. (Leipzig) 122, 113 (1926).

Vorob'ev, A. F., Vestn. Moskov. Univ., Ser. Khim. No. 5, 3 (1965).

Vorob'ev, A. F., Ibragin, N. A., and Skuratov, S. M., Russ. J. Inorg. Chem. (Eng. Trans.) 11, 13 (1966).

Vorob'ev, A. F., Monaenkova, A. S., and Pashlova, E. B., Zh. Obshch. Khim. 48, 6 (1978).

Voskresenskaya, N. K., and Ponomereva, K. S., Zh. Fiz. Khim. 20, 433 (1946).

Voskresenskaya, N. K., and Rutskov, A. P., Izvest, Akad. Nauk SSSR, Ser. 1. Khim. No. 5, 795 (1940).

Voskresenskaya, N. K., and Yankovskaya, G. N., Izvest. Akad. Nauk. SSSR, Ser. 1. Khim. 1, 3 (1945).

Vrevskii, M. S., and Zavaritskii, N. N., Russkoe Fiziko-Khim. Obshch. Zh. Chast. Khim. 54, 348 (1923).

Wagman, D. D., and Kilday, M. V., J. Res. Nat. Bur. Stand. A 77, 569 (1973).

Wakefield, Z. T., Luff, B. B., and Reed, R. B., J. Chem. Eng. Data 17, 420 (1972).

Wallace, W. E., J. Am. Chem. Soc. 71, 2485 (1949).

Wallace, W. E., Offutt, W. F., and Robinson, A. L., J. Am. Chem. Soc. 65, 347 (1943).

Wallace, W. E., and Robinson, A. L., J. Am. Chem. Soc. 63, 958 (1941).

Ward, G. K., and Millero, F. J., J. Chem. Thermodyn. 5, 591 (1973).

Wassermann, A., Z. Phys. Chem. (Leipzig) A146, 409 (1930 a).

Wassermann, A., Z. Phys. Chem. (Leipzig) A146, 446 (1930 b).

Wen, W. Y., LoSurdo, A., Jolicoeur, C., and Boileau, J., J. Phys. Chem. 80, 466 (1976).

Wetmore, F. E. W., and Gordon, A. R., J. Chem. Phys. 5, 60 (1937).

White, C. M., J. Am. Chem. Soc. 58, 1615 (1936).

White, C. M., J. Phys. Chem. 44, 494 (1940).

Whitlow, E. P., and Felsing, W. A., J. Am. Chem. Soc. 66, 2028 (1944).

Wicke, E., Eigen, M., and Ackermann, Th., Z. Phys. Chem. (Frankfurt am Maim) 1, 340 (1954).

Wilson, D. P., and Wen, W. Y., J. Phys. Chem. 79, 1527 (1975).

Wilson, G. L., and Miles, F. D., Trans. Faraday Soc. 36, 356 (1940).

Wilson, H. R., and McCabe, W. L., Ind. Eng. Chem. 34, 558 (1942).

Winkelman, A., Ann. Phys. (Leipzig) 149, 1 (1873).

Wood, R. H., Anderson, H. L., Beck, J. D., France, J. R., deVry, W. E., and Soltzberg, L. J., J. Phys. Chem. 71, 2149 (1967).

Wood, R. H., and Belkin, F., J. Chem. Eng. Data 18, 184 (1973).

Wood, R. H., Rooney, R. A., and Braddock, J. N., J. Phys. Chem. 73, 1673 (1969).

Woolley, E. M., and Hepler, L. G., Can. J. Chem. 55, 158 (1977).

Woolley, E. M., Hill, J. O., Hannan, W. K., and Hepler, L. G., J. Solution Chem. 7, 385 (1978).

Wrewsky, M., and Kaigorodoff, A., Z. Phys. Chem. (Leipzig) 112, 83 (1924); Zh. Russ. Fiz. Khim. Ob. Chast. Khim. 54, 336 (1923).

Wrewsky, M., and Sawaritsky, N., Z. Phys. Chem. (Leipzig) 112, 90 (1924).

Wu, Y. C., Thesis, Univ. of Chicago (1957).

Wu, Y. C., and Friedman, H. L., J. Phys. Chem. 70, 166 (1966 a).

Wu, Y. C., and Friedman, H. L., J. Phys. Chem. 70, 501 (1966 b).

Wüst, J., and Lange, E., Z. Elektrochem. 30, 523 (1924).

Wüst, J., and Lange, E., Z. Physik. Chem. (Leipzig) 116, 161 (1925).

Yatsimirskii, K. B., and Karacheva, G. A., Russ. J. Inorg. Chem. (Eng. Trans.) 4, 127 (1959); Zh. Neorg. Khim. 4, 294 (1959).

Yatsimirskii, K. B., and Shutov, A. A., Zh. Fiz. Khim. 28, 30 (1954).

Young, T. F., and Groenier, W. L., J. Am. Chem. Soc. 58, 187 (1936).

Young, T. F., and Machin, J. S., J. Am. Chem. Soc. 58, 2254 (1936).

Young, T. F., and Seligmann, P., J. Am. Chem. Soc. 60, 2379 (1938).

Young, T. F., and Vogel, O. G., J. Am. Chem. Soc. 54, 3030 (1932).

Yudin, J. D., Zh. Fiz. Khim. 13, 1346 (1939).

Zdanovskii, A. B., Russ. J. Phys. Chem. (Eng. Trans.) 46, 1348 (1972).

Zdanovskii, A. B., and Matsenok, E. A., Zh. Fiz. Khim. 11, 861 (1938).

Zittle, C. A., and Schmidt, C. L. A., J. Biol. Chem. 108, 161 (1935).

Zwicky, F., Phys. Z. 27, 271 (1926).

NBS-114A (REV. 9-78)

U.S. DEPT. OF COMM.
BIBLIOGRAPHIC DATA SHEET

1. PUBLICATION OR REPORT NO.
NBS SP 537

2. Gov't. Accession No.

3. Recipient's Accession No.

4. TITLE AND SUBTITLE

A Bibliography of Sources of Experimental Data Leading to Thermal Properties of Binary Aqueous Electrolyte Solutions

5. Publication Date
March 1979

6. Performing Organization Code

7. AUTHOR(S)

David Smith-Magowan and Robert N. Goldberg

8. Performing Organ. Report No.

9. PERFORMING ORGANIZATION NAME AND ADDRESS

NATIONAL BUREAU OF STANDARDS
DEPARTMENT OF COMMERCE
WASHINGTON, DC 20234

10. Project/Task/Work Unit No.

11. Contract/Grant No.

12. SPONSORING ORGANIZATION NAME AND COMPLETE ADDRESS *(Street, City, State, ZIP)*

Office of Standard Reference Data
National Measurement Laboratory
National Bureau of Standards
Washington, DC 20234

Division of Energy Storage Systems
Department of Energy
Washington, DC 20545

13. Type of Report & Period Covered

14. Sponsoring Agency Code

15. SUPPLEMENTARY NOTES

Library of Congress Catalog Card Number: 79-600010

☐ Document describes a computer program; SF-185, FIPS Software Summary, is attached.

16. ABSTRACT *(A 200-word or less factual summary of most significant information. If document includes a significant bibliography or literature survey, mention it here.)*

Contained herein is a bibliography of sources of experimental data that can be used to calculate either relative apparent molal enthalpies or apparent molal heat capacities for aqueous electrolyte solutions. The data types included are calorimetric heat capacity measurements, enthalpies of solution as a function of molality, enthalpy of dilution measurements, electromotive force measurements as a function of temperature, and vapor pressure measurements as a function of temperature. Approximately 900 references to the primary literature are included.

17. KEY WORDS *(six to twelve entries; alphabetical order; capitalize only the first letter of the first key word unless a proper name; separated by semicolons)*

Apparent molal heat capacity; aqueous systems; bibliography; electrochemistry; electrolytes; enthalpy of dilution; heat capacity; relative apparent molal enthalpy; salt solutions; thermochemistry; vapor pressure.

18. AVAILABILITY ☒ Unlimited

☐ For Official Distribution. Do Not Release to NTIS

☒ Order From Sup. of Doc., U.S. Government Printing Office, Washington, DC 20402, SD Stock No. SN003-003-02033-8

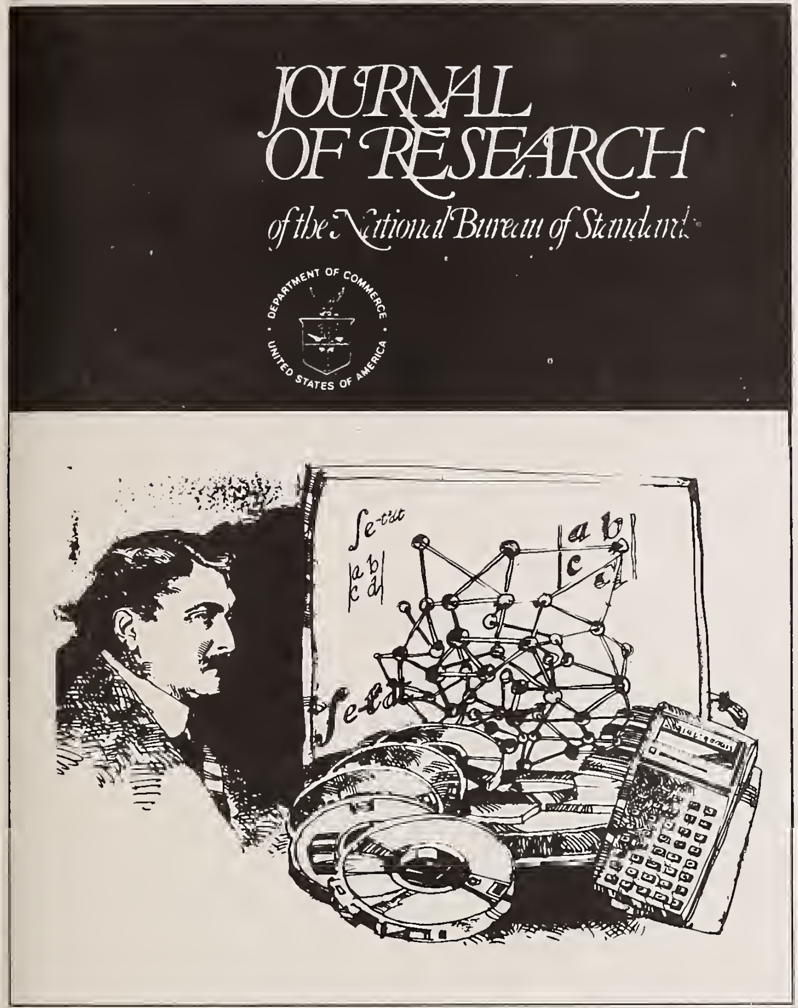
☐ Order From National Technical Information Service (NTIS), Springfield, VA. 22161

19. SECURITY CLASS (THIS REPORT)
UNCLASSIFIED

20. SECURITY CLASS (THIS PAGE)
UNCLASSIFIED

21. NO. OF PRINTED PAGES
89

22. Price
$2.75



Subscribe now — The new National Bureau of Standards Journal

The expanded Journal of Research of the National Bureau of Standards reports NBS research and development in those disciplines of the physical and engineering sciences in which the Bureau is active. These include physics, chemistry, engineering, mathematics, and computer sciences. Papers cover a broad range of subjects, with major emphasis on measurement methodology, and the basic technology underlying standardization. Also included from time to time are survey articles on topics closely related to the Bureau's technical and scientific programs. As a special service to subscribers each issue contains complete citations to all recent NBS publications in NBS and non-NBS media. Issued six times a year. Annual subscription: domestic $17.00; foreign $21.25. Single copy, $3.00 domestic; $3.75 foreign.

- Note: The Journal was formerly published in two sections: Section A "Physics and Chemistry" and Section B "Mathematical Sciences."

NBS Board of Editors
Churchill Eisenhart,
Executive Editor (Mathematics)
John W. Cooper (Physics)
Donald D. Wagman (Chemistry)
Andrew J. Fowell (Engineering)
Joseph O. Harrison (Computer Science)
Helmut W. Hellwig (Boulder Labs.)

For a review copy, write Journal of
Research, National Bureau of Standards,
U.S. DEPARTMENT OF COMMERCE
Washington, D.C. 20234

Subscription Order Form

Enter my subscription to NBS Journal of Research at $17.00. Add $4.25 for foreign mailing. No additional postage is required for mailing within the United States or its possessions.

(SJR—File Code 2Q)

Send Subscription to:

Name-First, Last

Company Name or Additional Address Line

Street Address

City

State

Zip Code

☐ Remittance Enclosed (Make checks payable to Superintendent of Documents)

☐ Charge to my Deposit Account No.

MAIL ORDER FORM TO:
Superintendent of Documents
Government Printing Office
Washington, D.C. 20402

☆U.S. GOVERNMENT PRINTING OFFICE: 1979-281-067/14

NBS TECHNICAL PUBLICATIONS

PERIODICALS

JOURNAL OF RESEARCH—The Journal of Research of the National Bureau of Standards reports NBS research and development in those disciplines of the physical and engineering sciences in which the Bureau is active. These include physics, chemistry, engineering, mathematics, and computer sciences. Papers cover a broad range of subjects, with major emphasis on measurement methodology, and the basic technology underlying standardization. Also included from time to time are survey articles on topics closely related to the Bureau's technical and scientific programs. As a special service to subscribers each issue contains complete citations to all recent NBS publications in NBS and non-NBS media. Issued six times a year. Annual subscription: domestic $17.00; foreign $21.25. Single copy, $3.00 domestic; $3.75 foreign.

Note: The Journal was formerly published in two sections: Section A "Physics and Chemistry" and Section B "Mathematical Sciences."

DIMENSIONS/NBS

This monthly magazine is published to inform scientists, engineers, businessmen, industry, teachers, students, and consumers of the latest advances in science and technology, with primary emphasis on the work at NBS. The magazine highlights and reviews such issues as energy research, fire protection, building technology, metric conversion, pollution abatement, health and safety, and consumer product performance. In addition, it reports the results of Bureau programs in measurement standards and techniques, properties of matter and materials, engineering standards and services, instrumentation, and automatic data processing.

Annual subscription: Domestic, $11.00; Foreign $13.75

NONPERIODICALS

Monographs—Major contributions to the technical literature on various subjects related to the Bureau's scientific and technical activities.

Handbooks—Recommended codes of engineering and industrial practice (including safety codes) developed in cooperation with interested industries, professional organizations, and regulatory bodies.

Special Publications—Include proceedings of conferences sponsored by NBS, NBS annual reports, and other special publications appropriate to this grouping such as wall charts, pocket cards, and bibliographies.

Applied Mathematics Series—Mathematical tables, manuals, and studies of special interest to physicists, engineers, chemists, biologists, mathematicians, computer programmers, and others engaged in scientific and technical work.

National Standard Reference Data Series—Provides quantitative data on the physical and chemical properties of materials, compiled from the world's literature and critically evaluated. Developed under a world-wide program coordinated by NBS. Program under authority of National Standard Data Act (Public Law 90-396).

NOTE: At present the principal publication outlet for these data is the Journal of Physical and Chemical Reference Data (JPCRD) published quarterly for NBS by the American Chemical Society (ACS) and the American Institute of Physics (AIP). Subscriptions, reprints, and supplements available from ACS, 1155 Sixteenth St. N.W., Wash., D.C. 20056.

Building Science Series—Disseminates technical information developed at the Bureau on building materials, components, systems, and whole structures. The series presents research results, test methods, and performance criteria related to the structural and environmental functions and the durability and safety characteristics of building elements and systems.

Technical Notes—Studies or reports which are complete in themselves but restrictive in their treatment of a subject. Analogous to monographs but not so comprehensive in scope or definitive in treatment of the subject area. Often serve as a vehicle for final reports of work performed at NBS under the sponsorship of other government agencies.

Voluntary Product Standards—Developed under procedures published by the Department of Commerce in Part 10, Title 15, of the Code of Federal Regulations. The purpose of the standards is to establish nationally recognized requirements for products, and to provide all concerned interests with a basis for common understanding of the characteristics of the products. NBS administers this program as a supplement to the activities of the private sector standardizing organizations.

Consumer Information Series—Practical information, based on NBS research and experience, covering areas of interest to the consumer. Easily understandable language and illustrations provide useful background knowledge for shopping in today's technological marketplace.

Order **above** *NBS publications from: Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.*

Order **following** *NBS publications—NBSIR's and FIPS from the National Technical Information Services, Springfield, Va. 22161.*

Federal Information Processing Standards Publications (FIPS PUB)—Publications in this series collectively constitute the Federal Information Processing Standards Register. Register serves as the official source of information in the Federal Government regarding standards issued by NBS pursuant to the Federal Property and Administrative Services Act of 1949 as amended, Public Law 89-306 (79 Stat. 1127), and as implemented by Executive Order 11717 (38 FR 12315, dated May 11, 1973) and Part 6 of Title 15 CFR (Code of Federal Regulations).

NBS Interagency Reports (NBSIR)—A special series of interim or final reports on work performed by NBS for outside sponsors (both government and non-government). In general, initial distribution is handled by the sponsor; public distribution is by the National Technical Information Services (Springfield, Va. 22161) in paper copy or microfiche form.

BIBLIOGRAPHIC SUBSCRIPTION SERVICES

The following current-awareness and literature-survey bibliographies are issued periodically by the Bureau:

Cryogenic Data Center Current Awareness Service. A literature survey issued biweekly. Annual subscription: Domestic, $25.00; Foreign, $30.00.

Liquified Natural Gas. A literature survey issued quarterly. Annual subscription: $20.00.

Superconducting Devices and Materials. A literature survey issued quarterly. Annual subscription: $30.00. Send subscription orders and remittances for the preceding bibliographic services to National Bureau of Standards, Cryogenic Data Center (275.02) Boulder, Colorado 80302.

U.S. DEPARTMENT OF COMMERCE
National Bureau of Standards
Washington, D.C. 20234

OFFICIAL BUSINESS

Penalty for Private Use, $300

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF COMMERCE
COM-215

U.S.MAIL

SPECIAL FOURTH-CLASS RATE
BOOK